

STANDARDIZED ASSESSMENT FRAMEWORK AND COMPETENCY-BASED QUESTION BANK



MIZORAM BOARD OF SCHOOL EDUCATION
AIZAWL : 796 012

2025

WWW.MBSE.EDU.IN



MIZORAM BOARD OF SCHOOL EDUCATION
AIZAWL : 796 012

Dated Aizawl, the 10th November, 2025

N O T I C E

No. K.11013/2/2022-MBSE(Acad)/19 : It is hereby notified for the information of all concerned that the Class 10 Competency-Based Item Bank, developed by the Mizoram Board of School Education, in collaboration with Azim Premji University has been issued for academic reference and use.

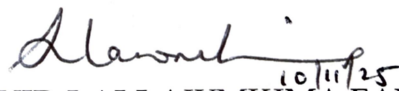
The Item Bank has been prepared in alignment with the National Education Policy 2020 and the National Curriculum Framework for School Education 2023. It is intended to serve as a model for the development of similar Item Banks for other classes in due course.

The Class 10 Competency-Based Item Bank shall be made available in soft copy format on the Board's official website www.mbse.edu.in.

Sd/- SARAH LALENGZAMI PACHUAU
Secretary
Mizoram Board of School Education

Memo No. No. K.11013/2/2022-MBSE(Acad)/19(A) : Dated Aizawl, the 10th November, 2025
Copy to :

1. The Secretary to Govt. of Mizoram, School Education Department.
2. The Director, School Education Department, Govt. of Mizoram, Aizawl.
3. The Principal, Institute of Advanced Study in Education, Aizawl.
4. The Controller of Examinations, MBSE.
5. Regional Officer, MBSE Regional Office, Lunglei.
6. All District Education Officers, Govt. of Mizoram, for information with a request to inform all High Schools under their jurisdiction the availability of the the Class 10 Competency-Based Item Bank in the official website of the Board.
7. System Administrator MBSE, for uploading in the official website.
8. All others concerned.
9. Guard File I.


(DAVID LALLAWMKIMA FANAÏ)
Director (Academic)
Mizoram Board of School Education



C O N T E N T S

Sl. No.	Subject	Page No.
1	English	1 – 90
2	Mizo	91 – 110
3	Science	111 – 194
4	Mathematics	195 – 247
5	Social Science	248 – 338

Foreword

It gives me great pleasure to present the Class 10 Competency-Based Item Bank, an important academic initiative of the Mizoram Board of School Education. This publication reflects our steadfast commitment to nurturing meaningful learning and strengthening assessment practices in accordance with the National Education Policy 2020 and the National Curriculum Framework for School Education 2023.

This Item Bank is the result of dedicated collaborative effort. Experienced teachers first developed the questions during an intensive workshop, after which they were reviewed and refined by subject experts from Azim Premji University to ensure clarity, fairness, and academic excellence. The collection comprises 357 questions from the Class 10 syllabus, including both multiple-choice and constructed-response formats. These items are designed to assess a broad range of cognitive abilities — from recalling and understanding concepts to applying knowledge, analysing information, evaluating ideas, and fostering creativity.

To support effective learning and transparent evaluation, each question is accompanied by a comprehensive marking scheme, including acceptable alternative responses and value points. This resource will serve as a guide for teachers in developing competency-based questions and will be a valuable tool for planning assessments, as well as for students preparing with confidence and clarity.

I look forward to seeing this Item Bank play a meaningful role in advancing competency-based education in our schools and in promoting deeper, more purposeful learning among our students. I extend my sincere appreciation to all educators and experts who contributed their time, effort, and expertise to this endeavour.

JH Zoremthanga
Chairman,
Mizoram Board of School Education

Item Bank – English

Mizoram Board of School Education (MBSE), Mizoram

Introduction

This Item Bank – English for class 10, Mizoram contains 108 items – both Multiple Choice Questions (MCQ) and Constructed Response (CR – which includes all other item types). All items in this Item Bank are Competency-based as per NEP 2020 and learning standards in NCF-SE. Items map to different cognitive levels – Remember, Understand, Apply, Analyse, Evaluate, Create. The quality parameters of validity, reliability, and fairness have been kept in mind while designing the items. Detailed marking schemes have been included for all CR items, including scope for alternative answers and corresponding value points. This Item Bank is designed to be used by both teachers and students.

Summary table

Content domains		Remember	Understand	Apply	Analyse	Evaluate	Create	Total no. of items
Reading Comprehension		1	5	-	2	2	-	10 MCQs
		-	4	2	2	1	1	10 CRs
Writing		-	-	10	-	-	10	20 CRs
Grammar		-	-	20	-	-	-	20 MCQs
Prose	Coursebook	3	7	2	6	-	-	18 MCQs
		-	2	-	1	6	1	10 CRs
	Literature Reader	-	1	-	1	1	-	3 MCQs
					2	2		4 CRs
Poetry	Coursebook	-	2	-	5	-	-	7 MCQs
			2		2	1		5 CRs
Drama	Literature Reader	-	-	-	-	1	-	1 CR
TOTAL		4	23	34	21	14	12	108

Domain: Reading Comprehension

Unseen Passage 1

What we know about LA fires victims

At least 25 people have died as wildfires rage in Los Angeles - and there are fears the number will rise.

Officials say it may take several weeks to identify victims as traditional methods - such as fingerprinting and visual identification - may not be possible.

Here is what we know about those who are reported to have died, according to their family members and international media.

Victor Shaw

Victor Shaw died trying to defend his home from the wildfire in Altadena, his family said.

The 66-year-old's body was found on the side of the road by his property, with a garden hose in his hand. The property had been in Mr Shaw's family for nearly 55 years, it reported.

Mr Shaw lived at the home with his younger sister Shari, who said she tried to get him to evacuate with her on Tuesday night as the fire moved closer.

She said that he refused because he wanted to try to fight the fire, adding that she had to flee because “the embers were so big and flying like a firestorm”.

Ms Shaw said that she would miss her big brother.

“I’ll miss talking to him, joking about, travelling with him and I’ll just miss him to death,” she said. “I just hate that he had to go out like that.”

Source: BBC (<https://www.bbc.com/news/articles/cdxe6lzvx9wo>)

MCQ: 1

Class	10	Subject	English
Cognitive level	Remember	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	With whom did Victor Shaw live?		
Key	His sister, Shari.		
Distractor 1	No one – He lived alone.		
Distractor 2	His parents.		
Distractor 3	His big brother.		


MCQ: 2


Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	Sequence the events in the passage. 1. Victor stayed back home and lost his life. 2. Wildfires raged through LA. 3. Media outlets interviewed people affected by the wildfires. 4. Shari tried to convince her brother to leave.		
Key	2, 4, 1, 3		
Distractor 1	1, 2, 3, 4		
Distractor 2	4, 3, 2, 1		
Distractor 3	3, 1, 4, 2		

MCQ: 3

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	What does the following sentence mean in the context of the passage? <i>‘there are fears the number may rise.’</i>		
Key	The number of wildfire victims are likely to increase.		
Distractor 1	The wildfires have led to an increase in temperature.		
Distractor 2	More family members are expected to die in the wildfires.		
Distractor 3	More people are likely to flee Los Angeles due to wildfires.		

MCQ: 4

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	Which picture communicates the meaning – ‘raging wildfires’.		
Key			

<i>Distractor 1</i>	
<i>Distractor 2</i>	
<i>Distractor 3</i>	

MCQ: 5

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	Why was Victor Shaw found dead with a gardening hose in his hand?		
Key	He was trying to extinguish the wildfire.		
Distractor 1	He was about to water his garden plants.		
Distractor 2	He was fixing the water supply.		
Distractor 3	He was going to keep the hose way.		

MCQ: 6

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	Identify a word (verb) from the passage that means the following: <i>‘to move people from a dangerous place to somewhere safer’</i>		
Key	evacuate		
Distractor 1	flee		
Distractor 2	fight		
Distractor 3	defend		

MCQ: 7

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	Identify the tone of Shari in the context of her statement – <i>“I just hate that he had to go out like that.”</i>		
Key	Frustrated		
Distractor 1	Gloomy		
Distractor 2	Nostalgic		
Distractor 3	Upset		

MCQ: 8

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	<p>Look at this sentence from the passage. It is presented here in two parts.</p> <p style="text-align: center;">At least 25 people have died as wildfires rage in Los Angeles... <i>(First part)</i> - and there are fears the number will rise. <i>(Second part)</i></p> <p>What is the relationship between the first and second parts of the sentence?</p> <p>The second part:</p>		
Key	elaborates the problem in the first part.		
Distractor 1	is the same as the second part.		
Distractor 2	contradicts the first part.		
Distractor 3	Solves the problem in the first part.		

MCQ: 9

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	<p>‘Agree’ or ‘Disagree’ with each of these statements in the context of the given passage.</p> <ol style="list-style-type: none"> 1. Family members are hesitant to speak to media outlets. 2. The wildfires have only resulted in property damage. 		

	3. Some of the houses have been in families for generations. 4. People have responded to the wildfires in different ways.
Key	1. Disagree; 2. Disagree; 3. Agree; 4. Agree
Distractor 1	1. Agree; 2. Agree; 3. Disagree; 4. Disagree
Distractor 2	1. Disagree; 2. Agree; 3. Disagree; 4. Agree
Distractor 3	1. Agree; 2. Disagree; 3. Agree; 4. Disagree

MCQ: 10

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		
Item stem	After the wildfires, local governments are looking for solutions to reduce loss of property. Identify which ideas are solutions and which are not. <ol style="list-style-type: none"> 1. Make multiple entrances and exits in the house. 2. Make concrete houses instead of wooden houses. 3. Maintain “green” vegetation in areas prone to wildfires. 4. Stop the use of coal, firewood, petrol, etc. 		
Key	1. Not a solution; 2. Solution; 3. Solution; 4: Not a solution		
Distractor 1	1. Solution; 2. Not a solution; 3. Not a solution; 4: Solution		
Distractor 2	1. Solution; 2. Not a solution; 3. Solution; 4: Not a solution		
Distractor 3	1. Not a solution; 2. Solution; 3. Not a solution; 4. Solution		

CR: 1

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		

Learning Outcome	Reads, comprehends, and responds to complex texts independently.
Marks	1
Item stem	Identify the sentence from the passage which tell us that the LA wildfires got worldwide attention.
Marking Scheme	
Expected Students Response	Marks
Student picks the correct sentence from the passage – ‘ <i>Here is what we know about those who are reported to have died, according to their family members and international media.</i> ’	1
Student picks any other sentence from the passage. No response, illegible response, or question is reproduced.	0

CR: 2

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Infers the figurative meaning of words and phrases as given in the texts read.		
Marks	1		
Item stem	Read the following statement given by Shari. What do the highlighted words mean in the context of the passage? “I just hate that he had to go out like that.”		
Marking Scheme			
Expected Students Response			Marks
Student uses ‘to die’ or any other words/phrases implying the same meaning.			1
Student makes any other interpretation not related to the above. No response, illegible response, or question is reproduced.			0

CR: 3

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	2		
Item stem	Why did Victor Shaw want to stay at home during the wildfires instead of fleeing?		

Marking Scheme

Expected Students Response	Marks
Student describes how Victor wanted to stay at home during the wildfires instead of fleeing because <u>he wanted to protect his home</u> e.g., by putting out the fire using water from the garden hose, as he was <u>sentimentally attached to his family home</u> of nearly 55 years (main reason). <i>Note: The underlined portions can be phrased any way as long as the same meaning is communicated. It is not necessary for the garden hose example or '55 years' to be mentioned.</i>	2
Cut 1 mark if the main reason is not mentioned.	1
Cut not more than ½ mark in total if more than 2 spelling and/or grammatical errors.	
Student describes any other reason not related to the above. No response, illegible response, or question is reproduced.	0

CR: 4

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	1		

Item stem	Why are traditional methods of identifying victims not possible in the case of wildfires?
Marking Scheme	
Expected Students Response	Marks
Student deciphers that traditional methods of identifying victims is not possible in the case of wildfires as the body is too burnt to leave any fingerprints or visual identifiers.	1
Student describes any other reason not related to the above. No response, illegible response, or question is reproduced.	0

CR: 5

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Reading Comprehension
<i>Competency</i>	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
<i>Learning Outcome</i>	Uses words according to the context and delineates them in speech and writing.		
<i>Marks</i>	2		
<i>Item stem</i>	Read the following sentence from the passage. Use the highlighted word in a sentence of your own. <i>‘Mr Shaw lived at the home with his younger sister Shari, who said she tried to get him to evacuate with her on Tuesday night as the fire moved closer.’</i>		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
Student uses the word ‘ <i>evacuate</i> ’ in a plausible sentence of their own.			<i>1</i>
Student uses the word ‘ <i>evacuate</i> ’ in a sentence, but it is implausible. No response, illegible response, or question is reproduced.			<i>0</i>

CR: 6

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and		

	interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.
Marks	1
Item stem	Read the following excerpt from the passage and convert it to indirect/reported speech. <i>“I’ll miss talking to him, joking about, travelling with him and I’ll just miss him to death,” she said.</i>
Marking Scheme	
Expected Students Response	Marks
Student converts the given direct speech into indirect/reported speech – ‘ <i>She said that she will miss talking to him, joking about, travelling with him and that she will just miss him to death.</i> ’	1
Cut ½ mark if student makes 1-2 errors (not more).	
More than 2 errors, no response, illegible response, or question is reproduced.	0

CR: 7

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	3		
Item stem	The passage describes the fire as ‘raging’ and says embers were flying ‘like a firestorm’. What effect do these descriptions have on the reader?		
Marking Scheme			
Expected Students Response			Marks
Student’s response analyses how the word choice in the passage communicates the seriousness and danger of the wildfires. The response is well-structured. A clear connection is made between the words used and the effect they have on the reader.			3

Student's response analyses how the word choice in the passage communicates the seriousness and danger of the wildfires. However, the response is not well-structured. A weak connection is made between the words used and the effect they have on the reader.	2
Student's response only agrees that the descriptions affect the reader, but the effect is not analysed. No connections are made.	1
Cut not more than ½ mark in total if more than 2 spelling and/or grammatical errors.	
Implausible response, no response, illegible response, or question is reproduced.	0

CR: 8

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Reading Comprehension
Competency	C-2.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings C-3.1 Analyses and evaluates the different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	3		
Item stem	Comment on the kind of relationship that Victor and his sister share. Cite evidence from the passage to support your answer.		

Marking Scheme

Expected Students Response	Marks
Student's response analyses that Victor, and his sister share a close bond, they care deeply for each other. – 1 mark Cites evidence from the passage to support the response e.g., Shari tried hard to convince Victor to evacuate (reason 1) and that Shari reminisces about the time she spends with her brother and misses her terribly (reason 2) – 1+1 marks Cut marks accordingly for missing details.	3
Cut not more than ½ mark in total if more than 2 spelling and/or grammatical errors.	
Implausible response, no response, illegible response, or question is reproduced.	0

CR: 9

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Reading Comprehension
Competency	C-1.1 Uses language appropriate to social context, expresses agreement and disagreement with reasons, and arrives at conclusions through discussion and debate		
Learning Outcome	<ul style="list-style-type: none">• Speaks or writes on variety of themes.• Talks on key contemporary issues like social justice, environment, gender, etc., in speech and writing.		
Marks	3		
Item stem	Wildfires may be due to both natural and human causes. Is there a similar issue (either natural or human made) that you find around yourself that causes loss of human life or property? Suggest at least two specific solutions to combat this issue.		
Marking Scheme			
Expected Students Response			Marks
Student identifies a similar issue (either natural or human made) in their surroundings that causes loss of human life or property e.g., landslide, earthquake, flood, or road accident. – 1 mark Student suggests at least 2 specific solutions for the identified issue. – 1+1 marks Cut marks accordingly for missing details.			3
Cut not more than ½ mark in total if more than 2 spelling and/or grammatical errors.			
Implausible response, no response, illegible response, or question is reproduced.			0

CR: 10

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Create	<i>Content Domain</i>	Reading Comprehension
<i>Competency</i>	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others		
<i>Learning Outcome</i>	Writes paragraphs, narratives, etc., by planning revising, editing, rewriting, and finalising.		
<i>Marks</i>	5		
<i>Item stem</i>	<p>Write a dialogue between Victor and Shari when she tried to convince him to evacuate, and he refused.</p> <p>Your dialogue must impactfully communicate Victor’s refusal to evacuate and an emotional appeal from sister to brother.</p>		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
<p>Format: Names of speakers, use of (:) or (-) – 1 mark</p> <p>Content and vocabulary: Creative use of persuasive words/ exclamations that impactfully communicate the refusal of Victor to evacuate and the emotional appeal from sister to brother – 2 marks</p> <p>Structure: Conversation flows smoothly with a logical beginning and end – 2 marks</p>			<i>5</i>
<p>Cut 1 mark if the word choice is limited in usage of persuasive words/ exclamations, affecting the impact of the dialogue. Cut 1 mark if the format is followed but the dialogue seems incomplete or disjointed/interrupted. Cut not more than ½ mark in total if more than 2 spelling and/or grammatical errors.</p>			
<p>Implausible response, no response, illegible response, or question is reproduced.</p>			<i>0</i>

Domain: Writing

CR: 1

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Formal letter)
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	You are the Secretary of the Art and Craft Club of your school. Your club has decided to organise an exhibition of the items you have created. The amount collected by selling the items would be used for the benefit of the school. Write a letter to your Principal seeking permission for the same and specify the use of the total collection from this exhibition.		

Marking Scheme

Expected Students Response

The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Details out the use of the monetary collection from the exhibition.
- Details out the plan of exhibition for seeking permission.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.



Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 2

Class	10	Subject	English
Cognitive	Apply	Content Domain	Writing (Formal letter)

level			
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	<div>Recently, you came across the following news that talks about the cessation of serving mid-day meals in Mizoram schools.</div> <div><div><div></div><div><div>Mizoram News</div><div>15 October 2024 · 🌐</div></div></div><div>Two associations of school teachers in Mizoram have expressed apprehension that students will cease to receive mid-day meals soon due to the alleged failure of the government to provide sufficient funds.<p>The Mizoram Primary School Teachers' Association (MPSTA) and the Mizoram Middle School Teachers' Association (MMSTA) recently sent a joint letter to the school education department stating that they will stop providing midday meals from October 18 since it will not be possible for them to pay the cooks and for cooking costs.</p><p>They said that cooks had not been paid for their remuneration for four months.</p><p>School Education Department Director Lalsangliana said his office is in touch with the teacher associations to resolve the issue.</p></div><div></div><div>Write a letter to the Editor sharing your observations on the functioning of mid-day meal at your school.</div><div><div><div></div><div></div><div></div><div></div></div><div><ul style="list-style-type: none">• School name: Little Hearts Government Senior Secondary School, Falkawn• Absence and irregularity of cook• Frequent change and new appointment of cook• Gradual decrease in the quantity of food</div></div></div>		
Marking Scheme			
Expected Students Response			
The response will be awarded 5 marks only when all the following 5 points related to format, content and			

organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Includes all the key observation points mentioned in the question.
- Writes in detail the observations made on the functioning of midday meal at school.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 3

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Formal letter)
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	You have received an invitation to become a member of the jury panel in the annual singing competition of your town. A jury panel member is a part a small group who judges the performances in an event. Draft a letter accepting the proposal and confirming you position in the jury panel.		

Marking Scheme

Expected Students Response

The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Shows gratitude for the opportunity.

- Accepts the proposal marking availability for the event.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 4

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Writing (Message)
<i>Competency</i>	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
<i>Learning Outcome</i>	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
<i>Marks</i>	5		
<i>Item stem</i>	<p>You are Mamee. You are leaving for your friend’s place when you receive a call for your younger sister, Angam.</p> <p>Ri Ki: Hi! I’m Angam’s friend, Ri Ki. Is she home?</p> <p>Mamee: No, she’s out. But I can take your message if you want?</p> <p>Ri Ki: That’ll be great. Thanks! Please tell Ri Ki that the dress rehearsal for our dance function is postponed to Thursday.</p> <p>Mamee: Oh! What happened?</p> <p>Ri Ki: Actually, our costumes are still not ready! We are trying our best to complete them as soon as possible!</p> <p>Mamee: Ah! I see. I’ll pass on the message to Ri Ki. Is there anything else?</p> <p>Ri Ki: That’ll be all, thanks!</p> <p>Leave a message for your sister. Write in not more than 50 words.</p>		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			
The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:			

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Writes Ri Ki's message for Angam in brief sentences.
- States the reason why she is not available.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 5

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Message)
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	Your parents are not yet home from work, and you need to leave for your music class. Write a message in not more than 50 words asking them not to prepare dinner because you would like to make a special meal for them tonight.		

Marking Scheme**Expected Students Response**

The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Requests parents not to cook dinner for the night.
- States in brief about the special dinner plans.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 6

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Notice)
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	<p>You are David, the Student President of your school. Your school is organising a donation drive for the refugee children living in the camps near the border. Write a notice in not more than 50 words requesting all the students to take part in this donation drive.</p> <p>Date for donation drive: 1st April 2025 Time: 12-1 PM (Lunchbreak) Location: School Assembly Hall Items for donation: Old winter clothes, books, bags, stationery materials.</p>		

Marking Scheme

Expected Students Response

The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Writes about the cause and purpose of the drive.
- Mentions the key points given in the question and details of the requirements for the donation drive.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 7

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Notice)
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	<p>As the class monitor of your section, draft a notice in not more than 50 words requesting your classmates to join a meeting for the upcoming Teacher's Day celebration.</p> <p>Date: 31st August 2025 Time: 10:30 AM Place: Classroom, X-B Points of discussion: Sharing responsibility to write thank you note for each teacher, decoration, gifts, food and drink</p>		

Marking Scheme**Expected Students Response**

The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Writes about the cause and purpose of the meeting.
- Mentions the key points given in the question.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 8

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Notice)
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	<p>You are Sangliana, the Secretary of the Reader's Club of your school. Your school has invited a famous writer of your state, Zoramthanga to read out his recent book <i>The Golden Years of My School</i>. In the book, he shares his enriching experiences from his school days and how these experiences have shaped him as a person to successfully navigate through life. Draft a notice for the students of classes 9-12 to attend the reading session with Zoramthanga.</p> <p>Date: 3rd June 2025 Time: 10:00 AM Place: School Library</p>		

Marking Scheme

Expected Students Response

The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Writes about the cause and purpose of the meeting.
- Mentions the key points given in the question.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 9

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Invitation)
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	Your father is retiring from his service as a teacher next week and your mother has planned a small surprise party for him. Draft an invitation for your extended family and family friends to celebrate the occasion.		

Marking Scheme

Expected Students Response

The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Writes about the occasion and the plan for the guests.
- Specify all the required details for the party, e.g., date, time, place, keeping it a secret from father, dress code if any, etc.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 10

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Invitation)
Competency	C-1.3 Writes for real-life situations (invitations, speeches, condolence messages, notices, creative slogans, advertisements) and for school newsletter/magazine/journal.		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	5		
Item stem	<p>Your neighbourhood is organising a Local Food Carnival as a part of Pre-Christmas celebrations. You have been given the responsibility to draft the notice for this occasion, inviting all families of the neighbourhood to set up food stalls.</p> <ul style="list-style-type: none"> • Each family stall must serve one dish only. It can be a family favourite! • The price per portion should not go above ₹100. • No plastic! – Only environmentally friendly cutlery and packaging are allowed. 		

Marking Scheme**Expected Students Response**

The response will be awarded 5 marks only when all the following 5 points related to format, content and organisation of content are present in the answer. Marks will be deducted based on the absence of any of these points:

Format: 1 mark

- Accurately uses the format.

Content: 2 marks

- Writes about the details of the occasion and the plan for the event.
- Mentions the key points given in the question and add one's own, if required, while specifying all the required details like date, time, place, etc.

Organisation of ideas: 2 marks

- Ideas are extremely clear and coherent with an appropriate use of language.
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 1 mark

- No grammatical or spelling errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 11

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Writing (Article)
Competency	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	10		
Item stem	Write an article for your school magazine on the health hazards posed by junk food in 150 words using the following points: <ul style="list-style-type: none">• What do we mean by junk food?• Impact of junk food on the physical health of growing children• Reasons for the popularity of junk food among children• Mass media popularizing junk foods among children• Possible solutions for combating the problem at different levels—society, media, family etc		
Marking Scheme			
Expected Students Response			
<p>The response will be awarded 10 marks when all the following points related to content, organisation of ideas and accuracy of grammar and punctuation are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 4 marks</p> <ul style="list-style-type: none">• Defining junk foods• Negative impact of junk food• Causes of the popularity of junk food• How to create awareness regarding the evil effects of junk foods <p>Organisation of ideas: 3 marks</p> <ul style="list-style-type: none">• Ideas are extremely clear and coherent with an appropriate use of language.• The response has a beginning, middle and an end, and the ideas flow logically• Uses a wide range of vocabulary appropriate to the context. <p>Accuracy: 3 marks</p> <ul style="list-style-type: none">• No errors of spelling, grammar or punctuation <p>Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.</p>			

CR: 12

Class	10	Subject	English
Cognitive level	Create	Content Domain	Writing (Letter to the editor)
Competency	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	10		
Item stem	<p>Read the following newspaper report published in a local newspaper and write a letter to the Editor of the paper highlighting the growing menace of cybercrime across the country and the need for taking stringent measures by the government to curb the growing menace.</p> <p><i>Over Rs 4.09 lakh was debited from the bank account of a 36-year-old man after he clicked on a link sent by a fraudster claiming to provide subsidised loans under the Prime Minister's Kisan Yojana. The victim's phone was hacked, and transactions were allowed through OTP access. Following a complaint by the victim, the Aizwal cybercrime police booked a case.</i></p>		

Marking Scheme**Expected Students Response**

The response will be awarded 10 marks when all the following points related to content, organisation of ideas and the format, and accuracy of spelling, grammar and punctuation are present in the answer. Marks will be deducted based on the absence of any of these points:

Content: 3 marks

- Discusses the menace of cybercrime in general with a particular reference to the news item published in the newspaper
- Discusses the need for creating public awareness regarding the danger of cybercrime by fraudsters
- Suggests measures to be taken by the Government to prevent the occurrence of similar incident³

Organization of Ideas and format: 4 marks

- Uses the appropriate format
- Ideas are extremely clear and coherent with an appropriate use of language.
- The response has a beginning, middle and an end, and the ideas flow logically
- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 3 marks

- No errors of spelling, grammar or punctuation

CR: 13

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Create	<i>Content Domain</i>	Writing (Article)
<i>Competency</i>	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
<i>Learning Outcome</i>	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
<i>Marks</i>	10		
<i>Item stem</i>	Write an article on the popularity of social media among the students of the present generation highlighting its importance for the academic advancement of the students of Mizoram.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			
The response will be awarded 10 marks only when all the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points.			
Content: 4 marks			
<ul style="list-style-type: none">• Discusses the causes of the popularity of social media among the students.• Discusses how social media contributes to the academic advancement of the students.			
Organisation of ideas: 3 marks			
<ul style="list-style-type: none">• Ideas are extremely clear and coherent with an appropriate use of language.• Uses a wide range of vocabulary appropriate to the context.			
Accuracy: 3 marks			
<ul style="list-style-type: none">• No grammatical or spelling errors.			
Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.			

CR: 14

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Create	<i>Content Domain</i>	Writing (Article)
<i>Competency</i>	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
<i>Learning Outcome</i>	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
<i>Marks</i>	10		
<i>Item stem</i>	<p>Write a report on the celebration of <i>World Environment Day</i> in your school in about 150 words with the help of the cues given below:</p> <ul style="list-style-type: none">• The date, place and the arrangement for the function• Objectives of celebrating World Environment Day: Generating awareness among• The Chief Minister of Mizoram gracing the occasion, and asking the students to conserve resources and protect the environment• The concluding remarks by the Principal of your school		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			
<p>The response will be awarded 10 marks only when all the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 4 marks</p> <ul style="list-style-type: none">• All the four points given in the item stem are present in the response <p>Organisation of ideas: 3 marks</p> <ul style="list-style-type: none">• Ideas are extremely clear and coherent with an appropriate use of language.• Uses a wide range of vocabulary appropriate to the context. <p>Accuracy: 3 marks</p> <ul style="list-style-type: none">• No errors of grammar, spelling and punctuation marks <p>Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.</p>			


CR: 15

Class	10	Subject	English
Cognitive level	Create	Content Domain	Writing (Formal letter)
Competency	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	10		
Item stem	A new revised version of the book entitled ‘ <i>Culture and Folklore of Mizoram</i> ’ has just been released. Write a letter to the publisher, The Publications Divisions, Government of India, Soochna Bhavan, CGO Complex New Delhi 110001 requesting that a copy of the book be sent to you, giving your address. Your letter should have the following parts: addresses of the receiver and the sender, the salutation, the body of the letter, and the closing phrases and your signature.		
Marking Scheme			
Expected Students Response			
The response will be awarded 10 marks only when all the following points related to format, content, the organisation of content, and accuracy of grammar, spelling and punctuation are present in the answer. Marks will be deducted based on the absence of any of these points:			
Format: 3 marks			
<ul style="list-style-type: none">• Accurately uses the format.			
Content: 2 marks			
<ul style="list-style-type: none">• Writes about the details of the book• Specifies the mode of payment.			
Organisation of ideas: 2 marks			
<ul style="list-style-type: none">• Ideas are extremely clear and coherent with an appropriate use of language.• Uses a wide range of vocabulary appropriate to the context.			
Accuracy: 3 marks			
<ul style="list-style-type: none">• No errors of grammar, spelling and punctuation			
Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.			

CR: 16

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Create	<i>Content Domain</i>	Writing (Article)
<i>Competency</i>	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
<i>Learning Outcome</i>	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
<i>Marks</i>	10		
<i>Item stem</i>	<p>Write an article on how the natural resources of Mizoram can be utilised for the economic growth of the state. Your article must include the following points: (Word limit: 150 words)</p> <ul style="list-style-type: none">• About 57% of Mizoram’s area is covered by bamboo• Mizoram produces areca nut, ginger, turmeric and strawberries• Deposits of coal, limestone, silica sands• Blue mountains, picturesque villages and waterfalls		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			
<p>The response will be awarded 10 marks only when all the following points related to content, the organisation of content, and accuracy of grammar, spelling and punctuation are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 4 marks</p> <ul style="list-style-type: none">• Uses the points appropriately to highlight the natural resources of the State and the importance of bringing economic growth with the help of natural resources• Uses clear and relevant information, showcasing extensive knowledge with the topic.• Discusses the potentiality of tourism and cottage industry in the State <p>Organisation of ideas: 3 marks</p> <ul style="list-style-type: none">• Ideas are extremely clear and coherent with an appropriate use of language.• Uses a wide range of vocabulary appropriate to the context. <p>Accuracy: 3 marks</p> <ul style="list-style-type: none">• No errors of grammar, spelling and punctuation <p>Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.</p>			

CR: 17

Class	10	Subject	English
Cognitive level	Create	Content Domain	Writing (Article)
Competency	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	10		
Item stem	<p>Critically examine the following picture and respond to the following question:</p> <p>Write an article on how you enjoy these activities in your school, and how these activities make learning fun for children in schools. (Word limit: 150 words)</p> 		
Marking Scheme			
Expected Students Response	<p>The response will be awarded 10 marks only when all the following points related to content, the organisation of content, and accuracy of grammar, spelling and punctuation are present in the answer. Marks will be deducted based on the absence of any of these points:</p>		

Content: 4 marks

- Writes about the various activities shown in the picture
- Describes how they perform different activities in schools
- Reflects on these activities and describes how they enjoy the activities
- Suggests various ways in which they would like to perform these activities to make their days in the school enjoyable

Organisation: 3 marks

- The visual inputs are used accurately and appropriately to convey the message
- The article has a beginning, a middle and an end and there is cohesion among the paragraphs
- Tone is appropriate for an intended purpose.

Accuracy: 3 marks


- Uses a wide range of vocabulary appropriate to the context.
- No spelling, punctuation, or grammatical errors.

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 18

Class	10	Subject	English
Cognitive level	Create	Content Domain	Writing (Article)
Competency	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	10		
Item stem	Writer an article on the topic ‘ <i>Digital classrooms are better than traditional physical classrooms</i> ’ in 150 words using the cues given below. <ul style="list-style-type: none">• Greater flexibility in time and location• Diverse learning materials• Interactive multimedia content		
Marking Scheme			
Expected Students Response			
The response will be awarded 10 marks only when all the following points related to content, the organisation of content, and accuracy of grammar, spelling and punctuation are present in the answer. Marks will be deducted based on the absence of any of these points: Content: 4 marks <ul style="list-style-type: none">• Interprets the given inputs/cues appropriately; justifies a position with supporting evidence.• Uses information indicating knowledge/experience with the topic Organisation: 3 marks <ul style="list-style-type: none">• Strong sense of structure, paragraphing, and sequence.• The article has a beginning, a middle and an end and there is cohesion among the paragraphs Accuracy: 3 marks <ul style="list-style-type: none">• Varied sentences; wide range of vocabulary• No errors of Spelling, punctuation, and grammar. Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.			

CR: 19

Class	10	Subject	English
Cognitive level	Create	Content Domain	Writing (Article)
Competency	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of others		
Learning Outcome	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
Marks	10		
Item stem	<p>Analyse the picture and the cues given below and write an article for your school magazine on ‘Addiction to smartphones is affecting the mental health of the students’.</p> <div></div> <p>Your response should include the following negative points:</p> <ol style="list-style-type: none">1. Decrease in physical movement2. Reduced interaction with family and friends3. Cyberbullying4. Loss of sleep and appetite5. Fight with parents for increasing screen time6. Inability to concentrate on studies7. The online world seems more interesting and school seems less interesting		
Marking Scheme			
Expected Students Response			
<p>The response will be awarded 10 marks when all the following points related to content, organisation of ideas and the format, and accuracy of spelling, grammar and punctuation are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 4 marks</p> <ul style="list-style-type: none">• Interprets the given inputs appropriately; justifies a position with supporting evidence. <p>Organization of ideas: 3 marks</p> <ul style="list-style-type: none">• Ideas are extremely clear and coherent with an appropriate use of language.• The response has a beginning, middle and an end, and the ideas flow logically			

- Uses a wide range of vocabulary appropriate to the context.

Accuracy: 3 marks

- No errors of spelling, grammar or punctuation

Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.

CR: 20

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Create	<i>Content Domain</i>	Writing (Diary entry)
<i>Competency</i>	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experience and experience of other.		
<i>Learning Outcome</i>	Writes personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs, etc.		
<i>Marks</i>	10		
<i>Item stem</i>	<p>You went on a trip to New Delhi for the Republic Day celebration last year. Write a diary entry describing the trip, how you went, itinerary, places visited and the overall experience. Your diary entry should include the following points:</p> <ul style="list-style-type: none">• Booking tickets from Lengpui airport to New Delhi.• Your parents seeing you off at the airport.• Your uncle and aunt receiving you at New Delhi airport.• Your travel to India Gate to see the Republic Day parade.• Your uncle and aunt taking you out for a visit to Rashtrapati Bhavan, Rajghat Memorial, Chandi Chowk, Qutab Minar, Jantar Mantar and the National Museum.• Your return journey and arrival at Aizwal.• You overall impression of the visit.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			
<p>The response will be awarded 10 marks only when all the following points related to format, content and organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Format: 1 mark</p> <ul style="list-style-type: none">• Accurately uses the format. <p>Content: 4 marks</p> <ul style="list-style-type: none">• Mentions visits to all the places mentioned in the item stem• Reflects on the visits and records how he/she felt during the trip <p>Organisation of ideas: 2 marks</p> <ul style="list-style-type: none">• Ideas are extremely clear and coherent with an appropriate use of language• Uses a wide range of vocabulary appropriate to the context <p>Accuracy: 3 marks</p> <ul style="list-style-type: none">• No errors of grammar, spelling and punctuation <p>Irrelevant response, sentence copied from the question, illegible response, or no response will be awarded 0.</p>			

Domain: Grammar

MCQ: 1

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	A man told his daughter to keep his car key on the table. After some time, he asked her if she had followed his instruction. Choose the daughter's reply in passive voice.		
Key	It has been kept on the table.		
Distractor 1	It was kept on the table.		
Distractor 2	It had been kept on the table.		
Distractor 3	I have kept it on the table.		

MCQ: 2

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Choose the correct infinitive to complete the sentence below: While going for a walk this morning, we completely forgot _____ whether the road construction was over.		
Key	to check		
Distractor 1	checking		
Distractor 2	to be checking		
Distractor 3	to checked		

MCQ: 3

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Caroline has been going to the gym every morning for a long time. She has the intention to continue doing this. When she tells her friends, the correct sentence with the appropriate tense would be:		
Key	I go to the gym every morning.		
Distractor 1	I will be going to the gym every morning.		
Distractor 2	I am going to the gym every morning.		
Distractor 3	I have been going to the gym every morning.		

MCQ: 4

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p>Read the dialogue and choose the correct option:</p> <p style="text-align: center;">Mother: <i>Can you buy some groceries on your way back home?</i></p> <p>The correct way to report the above incident to your friend at school is:</p>		
Key	My mother asked me if I could buy some groceries on my way back home.		
Distractor 1	My mother asked me if I can buy some groceries on my way back home.		
Distractor 2	My mother has asked me to buy some groceries on my way back home.		
Distractor 3	My mother had asked me to buy some groceries on my way back home.		

MCQ: 5

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p><i>I wake up at 5 o'clock in the morning every day.</i></p> <p>Which of the following can substitute the given sentence in its past continuous tense?</p>		
Key	I was waking up at 5 o'clock in the morning.		
Distractor 1	I had been waking up at 5 o'clock in the morning.		
Distractor 2	I woke up at 5 o'clock in the morning.		
Distractor 3	I had woken up at 5 o'clock in the morning.		

MCQ: 6

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p><i>He asked, "Shall we go to school on Teacher's Day?"</i></p> <p>Which of the following can substitute the given speech in its indirect form?</p>		
Key	He asked if they should go to school on Teacher's Day.		
Distractor 1	He asks if they should go to school on Teacher's Day.		
Distractor 2	He asked if they shall go to school on Teacher's Day.		
Distractor 3	He asked if they should be going to school on Teacher's Day.		

MCQ: 7

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p style="text-align: center;"><i>“He struggled along, enduring many hospitalizations.”</i></p> <p>Which of the following can substitute the given sentence in its past perfect continuous tense?</p>		
Key	He had been struggling along, enduring many hospitalizations.		
Distractor 1	He was struggling along, enduring many hospitalizations.		
Distractor 2	He had struggled along, enduring many hospitalizations.		
Distractor 3	He has been struggling along, enduring many hospitalizations.		

MCQ: 8

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Which of the following sentences is grammatically correct?		
Key	The actor arrives at the airport.		
Distractor 1	The actor arrive at the airport.		
Distractor 2	The actor arriving at the airport.		
Distractor 3	The actor is arrives at the airport.		

MCQ: 9

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Which of the following sentences uses the correct preposition?		
Key	I came by bus.		
Distractor 1	I came in bus.		
Distractor 2	I came with bus.		
Distractor 3	I came on bus.		

MCQ: 10

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p>Rini and her sister are planning to go out for dinner. However, looking at the weather, Rini suggests:</p> <p style="text-align: center;"><i>If it rains in the evening, _____.</i></p> <p>Choose the correct clause to complete Rini's suggestion.</p>		
Key	we should cancel our dinner plans		
Distractor 1	we need to cancel our dinner plans		
Distractor 2	we are cancelling our dinner plans		
Distractor 3	we will cancel our dinner plans		

Note: The next 10 grammar MCQs (11-20) are based on the text ‘Wangari Maathai’ from the Coursebook. These are designed as samples to showcase how grammar can be both taught and assessed using content available in textbooks.

MCQ: 11

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p>Identify the part of the sentence that indicates negation.</p> <p><i>Those of us who witness the <u>degraded</u> state of the environment and the <u>suffering</u> that comes with it <u>cannot</u></i> (Part 1)(Part 2)(Part 3)</p> <p><i>afford to be <u>complacent</u>.</i> (Part 4)</p>		
Key	Part 3		
Distractor 1	Part 1		
Distractor 2	Part 2		
Distractor 3	Part 4		

MCQ: 12

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p>Choose the sentence that correctly nominalises the adjective in the sentence.</p> <p><i>We continue to be restless.</i></p>		
Key	We continue to have restlessness.		
Distractor 1	Our restlessness is continuous.		
Distractor 2	We are restless in our continuation.		
Distractor 3	Our continuation is restless.		

MCQ: 13

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p>Identify which part of the sentence is an adjective phrase:</p> <p style="text-align: center;"><u>The undaunted spirit of Wangari Maathai</u> shows clearly through <u>her inspiring words...</u></p> <p style="text-align: center;">(Part 1) (Part 2)</p>		
Key	Both Part 1 and Part 2 are adjective phrases		
Distractor 1	Only Part 1 is an adjective phrase		
Distractor 2	Neither Part 1 nor Part 2 are adjective phrases		
Distractor 3	Only Part 2 is an adjective phrase		

MCQ: 14

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Identify the sentence from ‘Wangari Maathai’ expressing exclamation.		
Key	We owe it to the present and future generations of all species to rise up and walk!		
Distractor 1	They are poor and have no cash income...		
Distractor 2	‘Inequality breeds insecurity,’ she said.		
Distractor 3	We can never be all equal, but we can ensure we do not allow excessive poverty or wealth.		

MCQ: 15

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Identify the sentence containing the superlative forms of adjectives from this sentence: <i>Wangari Maathai was a young girl growing up in the early 1940s in the small village of Ithithe in Kenya and life was next to perfect.</i>		
Key	The youngest tree in the garden is already bearing fruit.		
Distractor 1	Both the young and the old have a lot to learn from each other.		
Distractor 2	First serve food to the eldest members of the family.		
Distractor 3	Are you younger or older than your brother?		

MCQ: 16

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Identify the sentence that converts the given sentence into an interrogative: <i>There were leopards and elephants in the thick forests around...</i>		
Key	Were there leopards and elephants in the thick forests around?		
Distractor 1	What was in the thick forests around?		
Distractor 2	Where were the leopards and elephants?		
Distractor 3	Around when were there leopards and elephants in the thick forests?		

MCQ: 17

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p>Identify the sentence which is the correct transformation of the following sentence from affirmative to negative.</p> <p><i>Inequality breeds insecurity.</i></p>		
Key	Inequality does not breed insecurity.		
Distractor 1	Equality breeds security.		
Distractor 2	Equality does not breed security.		
Distractor 3	Inequality cannot breed insecurity.		

MCQ: 18

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	<p>Identify the subject-verb concord error in the following sentence:</p> <p><i>Kenya's forests were being clear and replaced by commercial plantations.</i></p>		
Key	'clear' should be 'cleared'		
Distractor 1	'replaced' should be 'replace'		
Distractor 2	'were being' should be 'are being'		
Distractor 3	'Kenya's forests' should be 'Kenya forests'		

MCQ: 19

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Identify the sentence that contains a non-finite verb.		
Key	This experience made her determined to address the main cause of poverty and environmental destruction.		
Distractor 1	The movement demanded a peaceful transition to democracy .		
Distractor 2	After further studies in Germany, she returned to a newly independent Kenya in 1966.		
Distractor 3	Wangari Maathai was active in the National Council of Women of Kenya from 1976 to 1987...		

MCQ: 20

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Grammar
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Uses grammatical items appropriate to the context in speech and writing.		
Marks	1		
Item stem	Identify the sentence which has an adverbial phrase. Sentence 1: Wangari Maathai died of cancer at the age of 71 on 25 September 2011. Sentence 2: In 2004, she was awarded the Nobel Peace Prize.		
Key	Both Sentence 1 and Sentence 2		
Distractor 1	Only Sentence 1		
Distractor 2	Only Sentence 2		
Distractor 3	Neither Sentence 1 nor Sentence 2		

Domain: Prose, poetry and drama (Literature)

MCQ: 1

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	<p>Read the following extract from the story <i>The Lap of Honour</i>. Which trait of Murray Halberg's character does it highlight?</p> <p><i>He was terribly disappointed at his failure. He felt he had let his country down. Was there any use in trying again? In the end, he decided that he would make another attempt. Now twenty-three, Halberg changed himself from a human being into a running machine. It seemed he could feel neither pain nor tiredness; there was hardly any feeling left in him. There was nothing except running in his life.</i></p>		
Key	Determination		
Distractor 1	Enthusiasm		
Distractor 2	Stoicism		
Distractor 3	defeatism		

MCQ: 2

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	<p>Read the following extract from <i>Two Gentlemen of Verona</i> and answer the question given below:</p> <p><i>One boy had on a worn jersey and cut-off khaki pants; the other a shortened army tunic gathered in loose folds about his skinny frame. Yet, gazing at the</i></p>		

	<p><i>two little figures, with their brown skins, tangled hair and dark earnest eyes, we felt ourselves strangely attracted.</i></p> <p>Identify the closest meaning of the word in bold as used in the extract.</p>
Key	serious
Distractor 1	deceptive
Distractor 2	gloomy
Distractor 3	bright

MCQ: 3

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	<p>Read the following extract from <i>Two Gentlemen of Verona</i>. Select the most appropriate option to complete the sentence given below the extract:</p> <p><i>There was a pause. Nicola was glaring at his young brother in vexation. We could not think of troubling you, sir, he said to me.</i></p> <p>Nicola reacted to the narrator's offer _____.</p>		
Key	politely		
Distractor 1	timidly		
Distractor 2	haughtily		
Distractor 3	casually		

MCQ: 4

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		

Marks	1
Item stem	<p>Read the following extract from <i>David's Story</i> and answer the question:</p> <p style="text-align: center;"><i>Don't be afraid to say 'no' to friends pressurizing you to do something you know you should not be doing. It is your life, and no one should decide how you should live it.</i></p> <p>How did David feel when he gave her the advice?</p>
Key	remorseful
Distractor 1	cheerful
Distractor 2	boastful
Distractor 3	mournful

MCQ: 5

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	<p>With reference to the story <i>David's Story</i>, read the following statements and choose the correct answer.</p> <p style="text-align: center;">Statement 1: David's Story is one of courage because he refused to give up even though his health was deteriorating.</p> <p style="text-align: center;">Statement 2: David's story is one of courage because Tete had the courage to ask David about his dreadful disease.</p>		
Key	Statement 1 is True and Statement 2 is False		
Distractor 1	Statement 1 is False and Statement 2 is True		
Distractor 2	Both Statement 1 and Statement 2 are False		
Distractor 3	Both Statement 1 and Statement 2 are True		

MCQ: 6

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experience as reflected in the text; presents orally or in writing		
Marks	1		
Item stem	<p>With reference to the story of <i>Wangari Maathai</i>, read the following statement and choose the correct answer.</p> <p>Assertion (A): Wangari Maathai's early work as a vet took her some of Kenya's poorest areas.</p> <p>Reason (R): Wangari Maathai became a heroic figure in the international struggle for a greenery world.</p>		
Key	Both A and R are True, but R is not the correct explanation of A		
Distractor 1	Both A and R are True, and R is the correct explanation of A		
Distractor 2	A is True and R is False		
Distractor 3	Both A and R are False		

MCQ: 7

Class	10	Subject	English
Cognitive level	Remember	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	What fatal disease did David suffer from?		
Key	AIDS		
Distractor 1	Cancer		
Distractor 2	Hepatitis		
Distractor 3	Tuberculosis		

MCQ: 8

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Read, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	<p>Read the following extract from <i>David's Story</i>, and answer the question that follows:</p> <p style="text-align: center;"><i>Making my way back home, there was no doubt in my mind. I was not alone. I sensed David watching over me with love and concern.</i></p> <p>How was the speaker's state of mind when she was returning home after visiting David's grave?</p>		
Key	peaceful		
Distractor 1	remorseful		
Distractor 2	distressed		
Distractor 3	obsessed		

MCQ: 9

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experience as reflected in the text; presents orally or in writing.		
Marks	1		
Item stem	<p>Read the extract from <i>Two Gentlemen of Verona</i> and answer the question as directed:</p> <p style="text-align: center;"><i>"Don't buy," warned Luigi, our cautious driver. "You will get much better fruits in Verona. Besides, these boys..." Yet, gazing at the two little figures, with their brown skins, tangled hair and dark earnest eyes, we felt ourselves strangely attracted."</i></p>		

	<p>Statement 1: The driver had a poor opinion about the boys selling wild strawberries</p> <p>Statement 2: The driver thought that the strawberries were of poor quality</p>
Key	Statement 1 and statement 2 are true.
Distractor 1	Statement 1 is true and statement 2 is false.
Distractor 2	Statement 1 is false and statement 2 is true.
Distractor 3	Statement 1 and statement 2 are false.

MCQ: 10

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Draws references from books, newspapers, internet, etc. and interprets using analytical skills.		
Marks	1		
Item stem	<p>Read the following extract from <i>Two Gentlemen of Verona</i> and choose the correct option.</p> <p style="text-align: center;"><i>“They sat beside me, not speaking. For my part, I did not say a word.”</i></p> <p>Why didn’t the writer say a word to the boys sitting beside him?</p>		
Key	Respect for their privacy		
Distractor 1	Respect for their devotion		
Distractor 2	Concern for their sister		
Distractor 3	Concern for his security		

MCQ: 11

Class	10	Subject	English
Cognitive level	Remember	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		

Marks	1
Item stem	In the story, <i>The Day of an American Journalist in 2889</i> , Mr. and Mrs. Bennet had lunch together even though they were miles apart. Which technological advancement made this possible?
Key	Phonotelephote
Distractor 1	Phototelegram
Distractor 2	Accumulator
Distractor 3	Video conferencing

MCQ: 12

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experiences as reflected in the text.		
Marks	1		
Item stem	<p>Read the extract taken from the story <i>A Face on the Wall</i> and answer the question that follows by choosing the correct option.</p> <p style="text-align: center;"><i>He seemed to be astonished as indeed he might, but he complied. With extreme deliberation, he took out his case and handed me his card.</i></p> <p>The reasons why Mr. Ormond Wall handed his card to a stranger could be:</p> <ol style="list-style-type: none"> 1. He wants to keep in touch with the stranger. 2. He doesn't want to be bothered further. 3. He is in a hurry and does not have time. 4. He just wants to make him happy. 		
Key	2 and 4		
Distractor 1	1 and 2		
Distractor 2	1 and 4		
Distractor 3	2 and 3		

MCQ: 13

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Coursebook)
Competency	Analyses and evaluates different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	<p>Read the extract taken from the story <i>A Face on the Wall</i> and answer the questions that follows by choosing the correct option.</p> <p><i>After coming to our senses, we looked round for Rudson-Wayte, who had brought this snake to bite our bosoms, but he too had disappeared.</i></p> <p>What would the listeners feel about Rudson-Wayte's disappearance?</p>		
Key	betrayed		
Distractor 1	annoyed		
Distractor 2	confused		
Distractor 3	exposed		

MCQ: 14

Class	10	Subject	English
Cognitive level	Remember	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends and responds to complex texts independently.		
Marks	1		
Item stem	Why did David ask Tete not to take life for granted? (<i>David's Story</i>)		
Key	Life is precious		
Distractor 1	Life is transitory		
Distractor 2	Life is uncertain		
Distractor 3	Life is complicated		

MCQ 15

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Uses words according to the context and delineates them in speech and writing.		
Marks	1		
Item stem	<p>Read the following extract from <i>A Face on the wall</i> and answer the question that follows:</p> <p style="text-align: center;"><i>I still tingle with mortification over an experience at Dabney's last evening, the only satisfaction being that others tingle with me.</i></p> <p>Which of the following words can replace the word 'mortification' in the extract quoted above?</p>		
Key	humiliation		
Distractor 1	jubilation		
Distractor 2	abstraction		
Distractor 3	hallucination		

MCQ 16

Class	10	Subject	English
Cognitive level	Apply	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Uses words according to the context and delineates them in speech and writing.		
Marks	1		
Item stem	<p>Read the following extract from <i>The Lap of Honour</i> and select the antonym for the word given in bold.</p> <p style="text-align: center;">Back in New Zealand, he seriously took up the task of helping disabled children.</p>		
Key	casually		
Distractor 1	earnestly		

Distractor 2	solemnly
Distractor 3	surreptitiously

MCQ 17

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experience as reflected in the text, presents orally or in writing		
Marks	1		
Item stem	<p>Which of the following character traits of Nicola and Jacopo impressed the narrator in the story <i>Two Gentlemen of Verona</i>?</p> <ol style="list-style-type: none"> 1. simplicity 2. dignity 3. nobility 4. maturity 		
Key	3 & 4		
Distractor 1	1 & 2		
Distractor 2	1 & 4		
Distractor 3	2 & 4		

MCQ 18

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experience as reflected in the text, presents orally or in writing		
Marks	1		
Item stem	Why did the narrator in <i>A Face on the Wall</i> make the following statement before beginning his story:		

	<i>‘Well,’ he said, ‘not a story in the ordinary sense of the word: nothing, that is from hearsay, like most of your examples.’</i>
Key	to ensure a willing suspension of disbelief by the audience
Distractor 1	to ensure the total attention of the audience
Distractor 2	to ensure the active participation of the audience
Distractor 3	to ensure the plausibility of the story by the audience

MCQ: 19

Class	10	Subject	English
Cognitive level	Analyze	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Appreciates nuances and shades of literary meanings, talks about literary devices like onomatopoeic sounds, symbols, metaphors, alliterations, comparisons, allusions and the poet’s or the writer’s point of view.		
Marks	1		
Item stem	<p>Read the following extract taken from <i>Written in the Fields</i> and select the figure of speech used by the poet in the underlined section of the extract:</p> <p style="text-align: center;"><i>Watching the sailing cloudlet's bright career, He mourns that day so soon has glided by: <u>E'en like the passage of an angel's tear</u> That falls through the clear ether silently.</i></p>		
Key	Simile		
Distractor 1	Metaphor		
Distractor 2	Personification		
Distractor 3	Alliteration		

MCQ: 20

Class	10	Subject	English
Cognitive level	Analyze	Content Domain	Poetry (Coursebook)
Competency	C-2.1 Analyses and evaluates different audio and written material		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		

Marks	1
Item stem	<p>Read the following two extracts taken from two poems by John Keats and identify the figure of speech common in both the extracts.</p> <p>a. <i>To one who has been long in the city pent, 'Tis very sweet to look into the fair And open face of heaven,—to breathe a prayer Full in the smile of the blue firmament, (Written in the Fields)</i></p> <p>b. <i>The Poetry of earth is never dead: When all the birds are faint with the hot sun, And hide in cooling trees, a voice will run From hedge to hedge about the new-mown mead; (On the Grasshopper and Cricket)</i></p>
Key	Personification
Distractor 1	Simile
Distractor 2	Metaphor
Distractor 3	Alliteration

MCQ: 21

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experience as reflected in the text; presents orally or in writing.		
Marks	1		
Item stem	<p>With reference to William Cooper's poem <i>The Poplar Field</i>, read the following statements and choose the correct answer.</p> <p>Assertion (A): The poet was heartbroken when he returned to his favourite place.</p> <p>Reason (R): The place has lost its essence that gave it a favourite spot in his heart.</p>		

Key	Both A and R are true, and R is the correct explanation of A
Distractor 1	Both A and R are true, but R is not the correct explanation of A
Distractor 2	A is True and R is False
Distractor 3	Both A and R are False

MCQ: 22

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experience as reflected in the text; presents orally or in writing.		
Marks	1		
Item stem	<p>Read the following excerpt from Rabindranath Tagore's <i>The Hero</i> and answer the question by choosing the correct option.</p> <p style="text-align: center;"><i>The neighbours, though, would say, 'What luck Khoka was with his mother!'</i></p> <p>How do the above line project the society's perspective on women?</p>		
Key	Woman as a dependent member of the society.		
Distractor 1	Woman as a gentle member of the society.		
Distractor 2	Woman as a witty member of the society.		
Distractor 3	Woman as a lucky member of the society.		

MCQ: 23

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Read, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	In the poem <i>Money-Madness</i> by DH Lawrence, why does the poet say money is a		

	collective madness?
Key	Because he believes that society is obsessed with acquiring wealth.
Distractor 1	Because he thinks that money is a term for mindless consumption.
Distractor 2	Because he assumes that money ruins the collective goodness of man.
Distractor 3	Because he reflects that people are judged by the amount of money they own.

MCQ: 24

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Read, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	<p>Read the lines from the poem <i>The Brook</i> by Alfred Tennyson.</p> <p style="text-align: center;"><i>I chatter, chatter, as I flow To join the brimming river,</i></p> <p>What does the poet mean by the phrase '<i>I chatter</i>'?</p>		
Key	The sound of brook while flowing over rocks.		
Distractor 1	The sound of brook hitting the banks.		
Distractor 2	The sound of brook while meeting the river.		
Distractor 3	The sound of the brook over the plains.		

MCQ: 25

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Identifies significant literary elements such as figurative language — metaphor, imagery, symbol, simile, intention or point of view, rhyme scheme, etc.		
Marks	1		

Item stem	<p>In the poem <i>The Brook</i>, Alfred Tennyson repeats the following line thrice.</p> <p style="text-align: center;"><i>For men may come and men may go, But I go on forever.</i></p> <p>What impact does this repetition create upon the reader?</p>
Key	It keeps reminding the reader that the brook is immortal.
Distractor 1	It keeps reminding the reader that humans cannot become the brook.
Distractor 2	It keeps reminding the reader that the brook is proud.
Distractor 3	It keeps reminding the reader that the brook is superior to human.

MCQ: 26

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Literature Reader)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experience as reflected in the text; presents orally or in writing		
Marks	1		
Item stem	<p>With reference to the autobiography of Helen Keller <i>The Story of My Life</i>, read the following statements and choose the correct answer.</p> <p style="text-align: center;">Assertion (A): In the initial years, Helen Keller found solace only around her mother. Reason (R): On request, her mother made her delicious ice-cream for dinner.</p>		
Key	Both A and R are true, but R is not the correct explanation of A		
Distractor 1	Both A and R are true, and R is the correct explanation of A		
Distractor 2	A is True and R is False		
Distractor 3	Both A and R are False		

MCQ: 27

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Prose (Literature Reader)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Analyses and appreciates a point of view or cultural experiences as reflected in the text.		
Marks	1		
Item stem	<p>What proves that people under the threat of famine can behave like beasts.</p> <p>Statement 1: People come out on the streets to parade. Statement 2: People rob each other for necessities. Statement 3: People kill each other for entertainment. Statement 4: People become selfish and destructive.</p> <p>Identify the correct statements with reference to the story <i>The Paper Plague</i> by Eero Tolvanen.</p>		
Key	Statement 2 and Statement 4		
Distractor 1	Statement 1 and Statement 2		
Distractor 2	Statement 3 and Statement 4		
Distractor 3	Statement 1 and Statement 3		

MCQ: 28

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Literature Reader)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Read, comprehends, and responds to complex texts independently		
Marks	1		
Item stem	<p>Choose the correct sequence in which the narrator of the story, <i>The Paper Plague</i>, realises that the world is hit by the plague.</p> <p>Sentence 1: There were layers of grey dust across the room and on the walls. Sentence 2: All paper wrappings, books and covers vanished from the</p>		

	<p>market.</p> <p>Sentence 3: His collection of books and the salary had turned into dust.</p> <p>Sentence 4: Only metal and plastic articles remained around the city.</p>
Key	Sentence 1, 3, 2, 4
Distractor 1	Sentence 2, 1, 4, 3
Distractor 2	Sentence 4, 2, 3, 1
Distractor 3	Sentence 3, 4, 1, 2

CR: 1

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Prose (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	5		
Item stem	<p>Read the following extract from <i>The Lap of Honour</i> and answer the question that follows:</p> <p style="text-align: center;"><i>After his great victory in the 5000 metre race, everyone thought that Halberg would win the 10,000 metre race easily. But Lydiard found a change in Halberg now.</i></p> <p>What is the change referred to in the extract quoted above? Do you think that this change had a connection with Halberg's experience of winning the Olympic final despite the paralysis of his left arm?</p>		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 5 marks only when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points</p> <p>Content: 3 marks</p> <ul style="list-style-type: none"> Halberg wanted to live his own life and do something useful with his life, rather than winning races Despite his paralysed left arm, Halberg became a great athlete, and realized that physically challenged persons could succeed in life He realized that his involvement with disabled children would bring him a deeper 	5

<p>sense of fulfilment than his Olympic victory.</p> <p>Organisation of the writing: 1 mark</p> <ul style="list-style-type: none"> The writing is well organized, and all sentences are connected cohesively <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> Sentences are grammatically correct without any spelling and punctuation errors 	
<p>The response will be awarded 4 marks only when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points</p> <p>Content: 2 marks</p> <p>Two of the following three points are mentioned:</p> <ul style="list-style-type: none"> Halberg wanted to live his own life and do something useful with his life, rather than winning races Despite his paralysed left arm, Halberg became a great athlete, and realized that physically challenged people could succeed in life He realized that his involvement with disabled children would bring him a deeper sense of fulfilment than his Olympic victory. <p>Organisation of the writing: 1 mark</p> <ul style="list-style-type: none"> The writing is well organized, and all sentences are connected cohesively <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> Sentences are grammatically correct without any errors of spelling and punctuation 	4
<p>The response will be awarded 3 marks only when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points</p> <p>Content: 1 mark</p> <ul style="list-style-type: none"> All the three points are not mentioned <p>Organisation of the writing: 1 mark</p> <ul style="list-style-type: none"> The writing is not well organised, and there is a lack of cohesion among the sentences <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> Sentences are grammatically incorrect but do not impede the meaning completely. 	3
<p>The response will be awarded 2 marks only when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points</p> <p>Content: 1 mark</p> <ul style="list-style-type: none"> Writes about one or two points out of the three points mentioned. <p>Organisation of the writing: ½ mark</p> <ul style="list-style-type: none"> Writing is poorly organized: ½ Mark <p>Accuracy: ½ mark</p>	2

<ul style="list-style-type: none"> Sentences are grammatically incorrect, and it impedes the meaning 	
<p>The response will be awarded 1 mark as specified below:</p> <p>Content: 1 mark</p> <ul style="list-style-type: none"> Only one point out of the three points is mentioned. <p>Organisation of the writing: 0</p> <ul style="list-style-type: none"> The writing is poorly organized. <p>Accuracy: 0</p> <ul style="list-style-type: none"> Sentences are grammatically incorrect, and it impedes the meaning 	1
No response	0

CR: 2

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings.		
Learning Outcome	Reads stories and literary texts, both fiction and non-fiction with understanding for pleasure and enjoyment and discusses about these.		
Marks	4		
Item stem	<p>Read the following extract from David's <i>Story</i> and answer the question that follows:</p> <p><i>He said to me in a whisper, 'Tete, I want you to learn from me. Having a good time and enjoying life does not mean putting your life at risk.'</i></p> <p>Why did David ask Tete to learn from him? Do you think that David's utterances were a confession of his guilt rather than general advice to a friend?</p>		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 4 marks when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> Writes about David's mistakes and how he suffered in his life Writes about David's repentance and his eagerness to protect Tete from putting her life at risk <p>Organisation of the writing and accuracy: 2 marks</p> <ul style="list-style-type: none"> The writing is well organized and persuasive and brings out the writer's point of 	4

<p>view: 1 mark</p> <ul style="list-style-type: none"> Sentences are grammatically correct without any errors of spelling and punctuation: 1 mark 	
<p>The response will be awarded 3 marks when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>Writes about one of the following points:</p> <ul style="list-style-type: none"> <i>Writes about David's mistakes and how he suffered in his life</i> Writes about David's repentance and his eagerness to protect Tete from putting her life at risk <p>Organisation of the writing and Accuracy: 2 marks</p> <ul style="list-style-type: none"> The writing is well organized and brings out the writer's point of view: 1 mark Sentences are grammatically correct with occasional errors of spelling and punctuation: 1 mark 	3
<p>The response will be awarded 2 marks when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>Writes about one of the following points:</p> <ul style="list-style-type: none"> Writes about David's mistakes and how he suffered in his life Writes about David's repentance and his eagerness to protect Tete from putting her life at risk <p>Organisation of the writing and Accuracy: 1 mark</p> <ul style="list-style-type: none"> The writing is well organized, but does not bring out the writer's point of view: ½ mark Sentences are not grammatically correct with errors of spelling and punctuation: ½ mark 	2
<p>The response will be awarded 1 mark as specified below:</p> <p>Content: 1 mark</p> <p>Writes about one of the following points:</p> <ul style="list-style-type: none"> Writes about David's mistakes and how he suffered in his life Writes about David's repentance and his eagerness to protect Tete from putting her life at risk <p>Organisation of the writing and accuracy: 0 marks</p> <ul style="list-style-type: none"> The writing is not well organized and does not bring out the writer's point of view. Sentences are not grammatically correct and it impedes the meaning of the response 	1
No response	0

CR: 3

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings.		
Learning Outcome	Reads stories and literary texts, both fiction and non-fiction with understanding for pleasure and enjoyment and discusses about these.		
Marks	4		
Item stem	<p>Read the following extract from <i>A Face on the Wall</i> and answer the question that follows:</p> <p style="text-align: center;"><i>I still tingle with mortification over an experience at Dabney’s last evening, the only satisfaction being that others tingle with me.</i></p> <p>Why does the author feel humiliated over the experience at Debney’s? Critically analyse the author’s experience in the context of the intermingling of reality and imagination in the story narrated by the stranger.</p>		
Marking Scheme			
Expected Students Response			Marks
<p>The response will be awarded 4 marks when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none">Writes about how the stranger fooled them by telling them a story that he made up just then, and brings out the element of surpriseWrites about how the story became a source of mystery and unease, evoking a sense of supernatural and psychological disturbance. <p>Organisation of the writing and accuracy: 2 marks</p> <ul style="list-style-type: none">The writing is well organized and persuasive and brings out the element of surprise: 1 markSentences are grammatically correct without any errors of spelling and punctuation: 1 mark			4
<p>The response will be awarded 3 marks when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>Writes about one of the following points:</p>			3

<ul style="list-style-type: none"> Writes about how the stranger fooled them by telling them a story that he made up just then, and brings out the element of surprise Writes about how the story became a source of mystery and unease, evoking a sense of supernatural and psychological disturbance. <p>Organisation of the writing and accuracy: 2 marks</p> <ul style="list-style-type: none"> The writing is well organized and brings out the writer's point of view: 1 mark Sentences are grammatically correct with occasional errors of spelling and punctuation: 1 mark 	
<p>The response will be awarded 2 marks when all the points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>Writes about one of the following points:</p> <ul style="list-style-type: none"> Writes about how the stranger fooled them by telling them a story that he made up just then, and brings out the element of surprise Writes about how the story became a source of mystery and unease, evoking a sense of supernatural and psychological disturbance <p>Organisation of the writing and accuracy: 1 mark</p> <ul style="list-style-type: none"> The writing is loosely organized, and does not bring out the writer's point of view: ½ mark Sentences are not grammatically correct with errors of spelling and punctuation: ½ mark 	2
<p>The response will be awarded 1 mark as specified below:</p> <p>Content: 1 mark</p> <p>Writes about the following point only:</p> <ul style="list-style-type: none"> Writes about how the stranger fooled them by telling them a story that he made up just then, and brings out the element of surprise <p>Organisation of the writing and accuracy: 0</p> <ul style="list-style-type: none"> The writing is not well organized and does not bring out the writer's point of view: Sentences are not grammatically correct, and it impedes the meaning of the response 	1
<p><i>No response</i></p>	0

CR: 4

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Prose (Coursebook)
Competency	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others		
Learning Outcome	Reads stories and literary texts, both fiction and non-fiction, with understanding for pleasure and enjoyment and discusses about these.		
Marks	4		
Item stem	Critically analyse the futuristic world depicted by Jules Verne in <i>A day in 2889 of an American Journalist</i> and relate it to the technological advances of today. Do you think that human beings will be overpowered by robots due to the rapid technological advances made by mankind?		
Marking Scheme			
Expected Students Response			Marks
<p>The response will be awarded 4 marks only when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none">Writes about the futuristic world where technology controls all the aspects of life, and cites the examples of phono telephone and the mechanised dressing room, the astronomical reporters, and the aero-car capable of gaining a speed of about four hundred miles an hourWrites about the danger of human beings being overpowered by robots, or the human beings being reduced to robots. <p>Organisation of the writing: 1 mark</p> <ul style="list-style-type: none">All Sentences are connected cohesively and organically <p>Accuracy: 1 mark</p> <ul style="list-style-type: none">No errors in grammar and spelling			4
<p>The response will be awarded 3 marks only when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <ul style="list-style-type: none">Writes about the futuristic world where technology controls all the aspects of life, and cites the examples of phono telephone and the mechanised dressing room, the astronomical reporters, and the aero-car capable of gaining a speed of about four hundred miles an hour, but does not discuss the possibility of human beings being overpowered by robots, or the human beings being reduced to robots.			3

Organisation of the writing: 1 mark <ul style="list-style-type: none"> All Sentences are connected cohesively and organically Accuracy: 1 mark <ul style="list-style-type: none"> No errors in grammar and spelling 	
<p>The response will be awarded 2 marks only when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> Content: 1 mark <ul style="list-style-type: none"> Writes about the futuristic world where technology controls all the aspects of life but does not cite the examples of phono telephone and the mechanised dressing room, the astronomical reporters, and the aero-car capable of gaining a speed of about four hundred miles an hour. Organisation of the writing: ½ mark <ul style="list-style-type: none"> All sentences are not connected cohesively and organically Accuracy: ½ mark <ul style="list-style-type: none"> Errors of grammar and spelling 	2
<p>The response will be awarded 1 mark as specified below:</p> Content: ½ mark <ul style="list-style-type: none"> Writes about the futuristic work without mentioning the details mentioned in the lesson: ½ mark Organisation of the writing: ½ mark <ul style="list-style-type: none"> Disjointed sentences impeding the meaning 	1
No response	0

CR: 5

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Evaluate	<i>Content Domain</i>	Prose (Coursebook)
<i>Competency</i>	C-1.2 Writes in different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others		
<i>Learning Outcome</i>	Reads stories and literary texts, both fiction and non-fiction, with understanding for pleasure and enjoyment and discusses about these.		
<i>Marks</i>	4		
<i>Item stem</i>	Though A.J. Cronin’s story <i>Two Gentlemen of Verona</i> is about two small boys whom the narrator and his companion met in the outskirts of Verona, the writer has used the title as <i>Two Gentlemen of Verona</i> , instead of <i>Two Boys of Verona</i> . How will you justify the use of <i>Two Gentlemen</i> in the title of the story?		
<i>Marking Scheme</i>			

<i>Expected Students Response</i>	<i>Marks</i>
<p>Content: 2 marks</p> <p>The response includes the following three key points:</p> <ul style="list-style-type: none"> Writes about selflessness and the dedication of the two boys to their sister and the ways in which they took the responsibility of meeting the expenses of her treatment Writes about <i>the maturity of the two boys</i>, the way they earned and saved money for the treatment of their sister This justifies the title and points out how it captures the maturity and the sense of responsibility of the two boys <p>Organisation: 1 mark</p> <ul style="list-style-type: none"> The writing is well organised and highly persuasive <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> No errors in grammar and spelling 	4
<p>Content: 1 mark</p> <p>The response includes one of the following three key points:</p> <ul style="list-style-type: none"> Writes about the selflessness and the dedication of the two boys to their sister and the ways in which they took the responsibility of meeting the expenses of her treatment Writes about <i>the maturity of the two boys</i>, the way they earned and saved money for the treatment of their sister Justifies the title and points out how it captures the maturity and the sense of responsibility of the two boys <p>Organisation: 1 mark</p> <ul style="list-style-type: none"> The writing is well organised and persuasive <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> No errors of grammar and spelling 	3
<p>Content: 1 mark</p> <p>The response includes one of the following three key points:</p> <ul style="list-style-type: none"> Writes about the selflessness and the dedication of the two boys to their sister and the ways in which they took the responsibility of meeting the expenses of her treatment Writes about <i>the maturity of the two boys</i>, the way they earned and saved money for the treatment of their sister Justifies the title and points out how it captures the maturity and the sense of responsibility of the two boys <p>Organisation: ½ mark</p> <ul style="list-style-type: none"> The writing is not organised and persuasive <p>Accuracy: ½ mark</p>	2

<ul style="list-style-type: none"> Errors of grammar and spelling 	
<p>Content: 1 mark</p> <p>Mentions one of the following points partially:</p> <ul style="list-style-type: none"> Writes about the selflessness and the dedication of the two boys to their sister and the ways in which they took the responsibility of meeting the expenses of her treatment Writes about <i>the maturity of the two boys</i>, the way they earned and saved money for the treatment of their sister Justifies the title and points out how it captures the maturity and the sense of responsibility of the two boys <p>Organisation: 0</p> <ul style="list-style-type: none"> The writing is not organised and consists of disjointed sentences <p>Accuracy: 0</p> <ul style="list-style-type: none"> Full of grammatical and spelling errors impeding the meaning 	1
No response	0

CR: 6

<i>Class</i>	10	<i>Subject</i>	
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Prose (Coursebook)
<i>Competency</i>	Analyses a literary text by close reading, critiquing form and tyle, and interpreting possible meanings		
<i>Learning Outcome</i>	Reads, comprehends, and responds to complex texts independently.		
<i>Marks</i>	5		
<i>Item stem</i>	How did Rudson-Wayte of <i>A Face on the Wall</i> convince his audience that the story he was going to tell them was ‘not a story in the ordinary sense of the word?’		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
The response will be awarded 5 marks when the following points related to content, organisation of ides and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points: Content: 2 marks <ul style="list-style-type: none">• He told his audience that he would tell them an occurrence that had happened to him personally• He told his audience that the incident he was going to narrate had completed that very afternoon on which he was reporting the incident Organisation of ideas: 2 marks			5

<ul style="list-style-type: none"> • Uses a wide range of vocabulary appropriate to the context • All the sentences are connected cohesively and organically <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> • No errors in grammar and spelling 	
<p>The response will be awarded 4 marks when all the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> • He told his audience that he would tell them an occurrence that had happened to him personally • He told his audience that the incident he was going to narrate had completed itself that very afternoon in which he was reporting the incident <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> • Uses limited vocabulary to express ideas <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> • Occasional errors of grammar and spelling 	4
<p>The response will be awarded 3 marks when all the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>One of the following points is mentioned:</p> <ul style="list-style-type: none"> • He told his audience that he would tell them an occurrence that had happened to him personally • He told his audience that the incident he was going to narrate had completed that very afternoon on which he was reporting the incident <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> • Uses limited vocabulary to express ideas <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> • Occasional errors of grammar and spelling 	3
<p>The response will be awarded 2 marks when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>One of the following points is mentioned:</p> <ul style="list-style-type: none"> • He told his audience that he would tell them an occurrence that had happened to him personally • He told his audience that the incident he was going to narrate had completed that very afternoon on which he was reporting the incident <p>Organisation of ideas: ½ mark</p>	2

<ul style="list-style-type: none"> Does not use appropriate vocabulary Accuracy: ½ mark <ul style="list-style-type: none"> Full of grammatical and spelling errors 	
<p>The response will be awarded 1 on the basis of the following criteria</p> <p>Content: 1 mark</p> <p>None of the following points are mentioned fully</p> <ul style="list-style-type: none"> He told his audience that he would tell them an occurrence that had happened to him personally He told his audience that the incident he was going to narrate had completed that very afternoon on which he was reporting the incident <p>Organisation of ideas: 0</p> <ul style="list-style-type: none"> Inappropriate appropriate vocabulary <p>Accuracy: 0</p> <ul style="list-style-type: none"> Full of grammatical and spelling errors impeding meaning 	1
No response	0

CR: 7

Class	10	Subject	English
Cognitive level	Evaluate W	Content Domain	Prose (Coursebook)
Competency	Writes in different styles (narrative, descriptive, expository, persuasive) from his own experiences and experiences of others.		
Learning Outcome	Reads stories and literary texts, both fiction and non-fiction with understanding for pleasure and enjoyment and discusses about these.		
Marks	4		
Item stem	Why does the writer remark that Wangari Maathai's early life was 'next to perfect?' Justify this statement with reference to her efforts to find a balance between the fulfilment of human needs and the protection of the natural environment.		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 4 marks when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> Writes about her contribution to the international struggle for a greener world and the movements in African nations for democracy Justifies the statement 'next to perfect.' 	4

<p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> • All the sentences are connected cohesively, and the writing is persuasive: 1 mark <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> • No errors in grammar and spelling 	
<p>The response will be awarded 3 marks when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> • Writes about her contribution to the international struggle for a greener world and the movements in African nations for democracy • Does not justify the statement <p>Organisation of ideas: 2 marks</p> <ul style="list-style-type: none"> • All the sentences are connected cohesively, but the writing is not persuasive <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> • A few grammar errors and spelling 	3
<p>The response will be awarded 2 marks when the following points related to content and organisation of ideas are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <ul style="list-style-type: none"> • Writes about one of the following points: <ul style="list-style-type: none"> ○ Her contribution to the international struggle for a greener world ○ Her contribution to the movements in African nations for democracy • Does not justify the statement <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> • Sentences are loosely connected cohesively, and the writing is not persuasive 	2
<p>The response will be awarded 1 mark when the following points related to content and organisation of ideas are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <ul style="list-style-type: none"> • Writes about one of the following points: <ul style="list-style-type: none"> ○ Her contribution to the international struggle for a greener world ○ Her contribution to the movements in African nations for democracy • Does not justify the statement <p>Organisation of ideas: 0 marks</p> <ul style="list-style-type: none"> • Sentences are not at all connected and the writing is not persuasive 	1
No response	0

CR: 8

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Prose (Coursebook)
Competency	Argues with proper rationale by carefully evaluating premises.		
Learning Outcome	Exhibits core values such as tolerance, appreciation of diversity and civic responsibility through debate, discussion, etc.		
Marks	4		
Item stem	Despite the fatal blunder committed by David, can we say that he was still a 'noble person?' Justify your answer based on your reading of the lesson <i>David's Story</i> .		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 4 marks when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> Justifies the answer with reference to the following points: <ul style="list-style-type: none"> Writes about David's deep regret for his blunder and his confession Writes about his sense of responsibility and deep concern for others <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> All the sentences are connected cohesively, and the writing is persuasive <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> No errors in grammar and spelling 	4
<p>The response will be awarded 3 marks when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <ul style="list-style-type: none"> The following two points are mentioned without justifying the answer <ul style="list-style-type: none"> Writes about David's deep regret for and his confession Writes about his sense of responsibility and deep concern for others <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> Sentences are connected cohesively, but the writing is not persuasive <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> Occasional errors of grammar and spelling 	3
<p>The response will be awarded 2 marks when the following points related to content, organisation of ideas, and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p>	2

Content: 1 mark <ul style="list-style-type: none"> One of the following two points are mentioned without justifying the answer <ul style="list-style-type: none"> Writes about David's deep regret for and his confession to Tete Writes about his sense of responsibility and deep concern for others Organisation of ideas: ½ mark <ul style="list-style-type: none"> Sentences are not connected cohesively, but the meaning is expressed to some extent Accuracy: ½ mark <ul style="list-style-type: none"> Errors of grammar and spelling 	
The response will be awarded 1 on the basis of the following points marks when the following points Content: 1 mark <ul style="list-style-type: none"> One of the following two points are mentioned without justifying the answer <ul style="list-style-type: none"> Writes about David's deep regret for and his confession to Tete Writes about his sense of responsibility and deep concern for others Organisation of ideas: 0 <ul style="list-style-type: none"> Sentences are not connected cohesively, and it impedes the meaning Accuracy: 0 marks <ul style="list-style-type: none"> Full of errors of grammar and spelling 	1
No response	0

CR: 9

Class	10	Subject	English
Cognitive level	Create	Content Domain	Prose (Coursebook)
Competency	Analyses a literary text by close reading, critiquing form and style and interpreting possible meanings		
Learning Outcome	Reads stories and literary texts, both fiction and non-fiction with understanding for pleasure and enjoyment and discusses about these.		
Marks	4		
Item stem	If you were in the place and position of Peta-Lynn, how would you have managed to fight against the crocodile and help your friend Graham with his wounds? Discuss your response with reference to the story <i>Don't Die Graham! Don't Die!</i>		
Marking Scheme			
Expected Students Response			Marks
The response will be awarded 4 marks when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based			4

<p>on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> • Writes about the maturity of Peta Lynn who acted in a way much beyond her age • Writes about how he/she would have responded to the situation <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> • All the sentences are connected cohesively, and the writing is persuasive <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> • No errors in grammar and spelling 	
<p>The response will be awarded 3 marks when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> • Writes about the maturity of Peta Lynn who acted in a way much beyond her age • Writes about how he/she would have responded to the situation <p>Organisation of ideas: ½ mark</p> <ul style="list-style-type: none"> • Sentences are not connected cohesively <p>Accuracy: ½ mark</p> <ul style="list-style-type: none"> • Occasional errors of grammar and spelling: ½ mark 	3
<p>The response will be awarded 2 marks when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>Writes on one of the following points:</p> <ul style="list-style-type: none"> • The maturity of Peta Lynn who acted in a way much beyond her age • How he/she would have responded to the situation <p>Organisation of ideas: ½ mark</p> <ul style="list-style-type: none"> • Sentences are not connected cohesively <p>Accuracy: ½ mark</p> <ul style="list-style-type: none"> • Occasional errors of grammar and spelling 	2
<p>The response will be awarded 1 mark when the following points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>Writes on one of the following points:</p> <ul style="list-style-type: none"> • The maturity of Peta Lynn who acted in a way much beyond her age • How he/she would have responded to the situation <p>Organisation of ideas: 0 marks</p> <ul style="list-style-type: none"> • Sentences are not connected cohesively, and it affects the meaning <p>Accuracy: 0 marks</p>	1

<ul style="list-style-type: none"> Errors of grammar and spelling impeding the meaning 	
<i>No response</i>	0

CR: 10

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Prose (Coursebook)
Competency	Writes in different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others.		
Learning Outcome	Reads stories and literary texts, both fiction and non-fiction, with understanding for pleasure and enjoyment and discusses about these.		
Marks	4		
Item stem	Careful planning plays a crucial role in Murray Halberg's success in 5000-metre race in 1960 Rome Olympics. (<i>The Lap of Honour</i>) Elaborate.		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 4 marks only when all the 3 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> Describes how Murray and his coach decided on a new plan, how to take the other runners by surprise, and depend on his great stamina Writes about the execution of the plan and its success in 1960 Rome Olympics. <p>Organisation of the writing: 1 mark</p> <ul style="list-style-type: none"> All Sentences are connected cohesively and organically: 1 mark <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> No errors in grammar and spelling: 1 mark 	4
<p>The response will be awarded 3 marks only when all the 3 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>The response mentions one of the following two points:</p>	3

<ul style="list-style-type: none"> • Describes how Murray and his coach decided on a new plan, how to take the other runners by surprise, and depend on his great stamina • Writes about the execution of the plan and its success in 1960 Rome Olympics. <p>Organisation of the writing: 1 mark</p> <ul style="list-style-type: none"> • Sentences are connected cohesively and organically <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> • No errors in grammar and spelling 	
<p>The response will be awarded 2 marks only when all the 3 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <p>The response mentions one of the following two points:</p> <ul style="list-style-type: none"> • Describes how Murray and his coach decided on a new plan, how to take the other runners by surprise, and depend on his great stamina • Writes about the execution of the plan and its success in 1960 Rome Olympics. <p>Organisation of the writing: ½ mark</p> <ul style="list-style-type: none"> • Sentences are not connected cohesively and organically <p>Accuracy: ½ mark</p> <ul style="list-style-type: none"> • Errors of grammar and spelling 	2
<p>The response will be awarded 1 mark based on the following points:</p> <p>Content: 1 mark</p> <p>The response mentions one of the following two points:</p> <ul style="list-style-type: none"> • Describes how Murray and his coach decided on a new plan, how to take the other runners by surprise, and depend on his great stamina • Writes about the execution of the plan and its success in 1960 Rome Olympics <p>Organisation of the writing: 0 marks</p> <ul style="list-style-type: none"> • Sentences are not connected cohesively, and it impedes the meaning <p>Accuracy: 0 marks</p> <ul style="list-style-type: none"> • Full of errors of grammar and spelling impeding meaning 	1
No response	0

CR: 11

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style and interpreting possible meanings.		
Learning Outcome	Analyses, appreciates nuances and shades of literary meanings, talks about the poet’s view		
Marks	5		
Item stem	<p>Read the lines from the poem Money Madness by DH Lawrence and answer the question that follows.</p> <p style="text-align: center;"><i>For mankind says with one voice: How much is he worth? Has he no money? Then let him eat dirt and go cold.</i></p> <p>How does money determine the worth of a person in present time? Elaborate with reference to the poem and your observation of the society.</p>		
Marking Scheme			
Expected Students Response			Marks
<p>The response will be awarded 5 marks only when all the following 5 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 3 marks</p> <ul style="list-style-type: none">Writes about the difference in status that money creates. A person with more money is seen as more powerful than the one who has less or nothing at all.Writes with an example about the benefits that money provides to a person and the one without money suffers from receiving even the necessities of life.Cites examples from personal experiences and observation of the society. <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none">The writing is well organized, and all sentences are connected cohesively. <p>Accuracy: 1 mark</p> <ul style="list-style-type: none">Sentences are grammatically correct without any spelling and punctuation errors.			5
<ul style="list-style-type: none">Deduct 1 mark for each missing key point in the content.Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning.Deduct not more than ½ mark in case of 2 spelling or grammatical error.			
Implausible response, no response, illegible response, or question is reproduced.			0

CR: 12

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style and interpreting possible meanings.		
Learning Outcome	Appreciates nuances and shades of literary meanings, talks about literary devices like onomatopoeic sounds, symbols, metaphors, alliterations, comparisons, allusions and the poet's or the writer's point of view.		
Marks	5		
Item stem	The use of personification in the poem <i>The Brook</i> by Alfred Tennyson helps the reader create a vivid image of the brook with lively and playful character. Analyse the use of this literary device across the poem with examples.		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 5 marks only when all the following 5 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 3 marks</p> <ul style="list-style-type: none"> The poem uses words that represent human speaking styles like <i>babble</i>, <i>chatter</i> and <i>murmur</i> for different sounds of the brook and human movements like <i>linger</i>, <i>loiter</i> and <i>travel</i>. The poem uses words that represent actions of living beings like <i>I slip</i>, <i>I slide</i>, <i>I gloom</i>, <i>I glance</i>. Moreover, the use of <i>I</i> across the poem like <i>I go on forever</i> highlights brook as the speaker and first person. <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> The writing is well organized, and all sentences are connected cohesively. <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> Sentences are grammatically correct without any spelling and punctuation errors. 	5
<ul style="list-style-type: none"> Deduct 1 mark for each missing key point in the content. Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning. Deduct not more than ½ mark in case of 2 spelling or grammatical error. 	
Implausible response, no response, illegible response, or question is reproduced.	0

CR: 13

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Poetry (Coursebook)
Competency	C-2.2 Argues with proper rationale by carefully evaluating premises.		
Learning Outcome	Analyses, appreciates nuances and shades of literary meanings, talks about the poet’s view		
Marks	4		
Item stem	With reference to the poem <i>The Hero</i> by Rabindranath Tagore, how do you understand the speaker’s wish to prove himself as strong and responsible man in the eyes of the society? Give two reasons to support your answer.		
Marking Scheme			
Expected Students Response			Marks
The response will be awarded 4 marks only when all the following 4 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points: Content: 2 marks <ul style="list-style-type: none">Writes about the speaker beginning the poem with the word ‘Imagine’ which means that he is narrating the story from his imagination to project himself as a hero.Writes about the speaker’s expectations from his mother and the society to appreciate his courage and valour in protecting his mother from the enemy. Organisation of ideas: 1 mark <ul style="list-style-type: none">The writing is well organized, and all sentences are connected cohesively. Accuracy: 1 mark <ul style="list-style-type: none">Sentences are grammatically correct without any spelling and punctuation errors.			4
<ul style="list-style-type: none">Deduct 1 mark for each missing key point in the content.Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning.Deduct not more than ½ mark in case of 2 spelling or grammatical error.			
Implausible response, no response, illegible response, or question is reproduced.			0

CR: 14

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form, and style, and interpreting possible meaning		
Learning Outcome	Analyses, appreciates nuances and shades of literary meanings, talks about the poet's view		
Marks	3		
Item stem	In the poem <i>Money Madness</i> by D.H. Lawrence, how does the poet portray the relationship between money and human nature?		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 3 marks only when all the following 3 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 1 mark</p> <ul style="list-style-type: none"> Writes about the influence of money over people's behaviour by making them obsessed with materialistic desires, power and social status. <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> The writing is well organized, and all sentences are connected cohesively. <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> Sentences are grammatically correct without any spelling and punctuation errors. 	3
<ul style="list-style-type: none"> Deduct 1 mark for each missing key point in the content. Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning. Deduct not more than ½ mark in case of 2 spelling or grammatical error. 	
Implausible response, no response, illegible response, or question is reproduced.	0

CR: 15

Class	10	Subject	English
Cognitive level	Understand	Content Domain	Poetry (Coursebook)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form, and style, and interpreting possible meaning		

Learning Outcome	Analyses, appreciates nuances and shades of literary meanings, talks about the poet's view
Marks	2
Item stem	How do you define the nature of brook with reference to DH Lawrence's <i>The Brook</i> ?
Marking Scheme	
Expected Students Response	Marks
<ul style="list-style-type: none"> Writes about the brook having a lively and playful nature. It is full of energy and life who loves to interact with its surroundings as it travels a long distance to meet the river. The writing is well organized, and all sentences are connected cohesively. Sentences are grammatically correct without any spelling and punctuation errors. 	2
<ul style="list-style-type: none"> Writes about the brook's nature without many details. The writing is poorly organized; however, it conveys the meaning. There are 2-3 grammatical, spelling or punctuation errors. 	1
Implausible response, no response, illegible response, or question is reproduced.	0

CR: 16

<i>Class</i>	10	<i>Subject</i>	English
<i>Cognitive level</i>	Analyse	<i>Content Domain</i>	Prose (Literature Reader)
<i>Competency</i>	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings.		
<i>Learning Outcome</i>	Reads, comprehends and responds to complex texts independently.		
<i>Marks</i>	3		
<i>Item stem</i>	What can be an epidemic in current times that would affect the world like the paper plague as given in the story <i>The Paper Plague</i> by Eero Talvanen? Elaborate your answer with examples.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
The response will be awarded 3 marks only when all the following 3 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points: Content: 1 mark <ul style="list-style-type: none">Names an epidemic relevant for the present times.			3

<ul style="list-style-type: none"> Elaborates the answer by giving examples of challenges the absence of this element would cause. Organisation of ideas: 1 mark <ul style="list-style-type: none"> The writing is well organized, and all sentences are connected cohesively. Accuracy: 1 mark <ul style="list-style-type: none"> Sentences are grammatically correct without any spelling and punctuation errors. 	
<ul style="list-style-type: none"> Deduct 1 mark for each missing key point in the content. Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning. Deduct not more than ½ mark in case of 2 spelling or grammatical error. 	
Implausible response, no response, illegible response, or question is reproduced.	0

CR: 17

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Prose (Literature Reader)
Competency	C-2.2 Argues with proper rationale by carefully evaluating premises.		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	4		
Item stem	With reference to your reading of <i>The Merchant of Venice</i> by William Shakespeare, do you think Shylock deserves the punishment that he had received at the end of the story? Give reasons to support your answer.		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 4 marks only when all the following 4 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> Shylock deserves the punishment (Opinion 1) <ul style="list-style-type: none"> Writes about Shylock's determination to take the life of Antonio, a Venetian citizen. Writes about Shylock's cruel and merciless nature. Shylock doesn't deserve the punishment (Opinion 2) <ul style="list-style-type: none"> Justifies Shylock's right to claim his bond. Justifies Shylock's hatred for Antonio. <p>Organisation of ideas: 1 mark</p>	4

<ul style="list-style-type: none"> The writing is well organized, and all sentences are connected cohesively. Accuracy: 1 mark <ul style="list-style-type: none"> Sentences are grammatically correct without any spelling and punctuation errors. 	
<ul style="list-style-type: none"> Deduct 1 mark for each missing key point in the content. Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning. Deduct not more than ½ mark in case of 2 spelling or grammatical error. 	
Implausible response, no response, illegible response, or question is reproduced.	0

CR: 18

Class	10	Subject	English
Cognitive level	Analyse	Content Domain	Prose (Literature Reader)
Competency	C-3.2 Analyses a literary text by close reading, critiquing form and style, and interpreting possible meanings		
Learning Outcome	Reads, comprehends, and responds to complex texts independently.		
Marks	5		
Item stem	Based on your reading of the story <i>The Corner Shop</i> by Lady Cynthia Mary Evelyn Asquith, compare and contrast the narrator's reaction during the first and the second visits to the antique shop.		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 5 marks only when all the following 5 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 3 marks</p> <ul style="list-style-type: none"> Writes about the narrator's first visit when the warm and cheerful atmosphere of the store and the welcoming tone of the sisters made him happy. Writes about the second visit when the dimly lit shop and the pale and trembling figure of the old man had a chilling effect on the narrator. Describes the contrasting feelings with which the narrator left the shop on both his visits. <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> The writing is well organized, and all sentences are connected cohesively. <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> Sentences are grammatically correct without any spelling and punctuation errors. 	5

<ul style="list-style-type: none"> Deduct 1 mark for each missing key point in the content. Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning. Deduct not more than ½ mark in case of 2 spelling or grammatical error. 	
Implausible response, no response, illegible response, or question is reproduced.	0

CR: 19

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Prose (Literature Reader)
Competency	C-2.2 Argues with proper rationale by carefully evaluating premises.		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	3		
Item stem	Read the line from Eero Talvanen’s <i>The Paper Plague</i> and answer the question that follows. <i>Perhaps this general spring cleaning may even prove to be a blessing.</i> Do you think the epidemic can be called ‘spring cleaning’? Give reasons to support your answer.		
Marking Scheme			
Expected Students Response			Marks
The response will be awarded 3 marks only when all the following 3 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points: Content: 1 mark <ul style="list-style-type: none">Agrees or disagrees with the answer to the question.If yes, writes about the new start that the epidemic has marked. Organisation of ideas: 1 mark <ul style="list-style-type: none">The writing is well organized, and all sentences are connected cohesively. Accuracy: 1 mark <ul style="list-style-type: none">Sentences are grammatically correct without any spelling and punctuation errors.			3
<ul style="list-style-type: none">Deduct 1 mark for each missing key point in the content.Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning.Deduct not more than ½ mark in case of 2 spelling or grammatical error.			
Implausible response, no response, illegible response, or question is reproduced.			0

CR: 20

Class	10	Subject	English
Cognitive level	Evaluate	Content Domain	Drama (Literature Reader)
Competency	C-2.2 Argues with proper rationale by carefully evaluating premises.		
Learning Outcome	Reads, comprehends, and responds to complex texts independently		
Marks	4		
Item stem	<p>Answer with reference to your reading of Sir Arthur Conan Doyle's <i>The Adventure of the Three Students</i>.</p> <p>If it was not for the Bannister, Gilchrist might not have accepted his mistake and decided to withdraw from the scholarship examination. Give at least two valid reasons to justify your agreement or disagreement with the statement.</p>		

Marking Scheme

Expected Students Response	Marks
<p>The response will be awarded 4 marks only when all the following 4 points related to content, organisation of ideas and accuracy are present in the answer. Marks will be deducted based on the absence of any of these points:</p> <p>Content: 2 marks</p> <ul style="list-style-type: none"> Agrees with the statement and gives two reasons to justify his/her agreement. The banister takes up the role of Gilchrist's father to make him realise his mistake. <p>or</p> <ul style="list-style-type: none"> Disagrees with the statement and gives two reasons to justify his/her disagreement. Gilchrist had already accepted his mistake and confessed everything to the banister before their conversation. <p>Organisation of ideas: 1 mark</p> <ul style="list-style-type: none"> The writing is well organized, and all sentences are connected cohesively. <p>Accuracy: 1 mark</p> <ul style="list-style-type: none"> Sentences are grammatically correct without any spelling and punctuation errors. 	4
<ul style="list-style-type: none"> Deduct 1 mark for each missing key point in the content. Deduct not more than ½ mark if the answer is poorly organised, but it conveys the meaning. Deduct 1 mark if the answer is poorly organised affecting its overall meaning. Deduct not more than ½ mark in case of 2 spelling or grammatical error. 	
Implausible response, no response, illegible response, or question is reproduced.	0

Item Bank – Mizo

Mizoram Board of School Education (MBSE), Mizoram

MCQ : 1

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Apply	CONTENT DOMAIN : Grammar
LEARNING OUTCOME : Uses grammatical items appropriate to the context in speech and writing.	
ITEM STEM : “Kutkem nei” tih hi tawng upain –	
KEY : Rukruk hmang	
Distraction 1 : Kut tiche reng	
Distraction 2 : Kheuh neuh neuh	
Distraction 3 : Kut te reuhte nei	

MCQ : 2

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : Hmanlai Zawlbuka inzirtirna leh tunlai school-a inzirtirna inanna chu	
KEY : Nungchang	
Distraction 1 : Sa kah dan	
Distraction 2 : Lo vah dan	
Distraction 3 : Hmeichhia leh mipa awm dan tur.	

MCQ : 3

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Evaluate	CONTENT DOMAIN : Poetry (Hla)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : ‘Zirtu kawng’ hlain min kawhhmuh a tum chu –	
KEY : Zirlai a hmatiamia zir	
Distraction 1 : Zirlai huaisen nih	
Distraction 2 : Zing thawhhma	
Distraction 3 : Thuawih	

MCQ : 4

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Poetry (Hla)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : 'Zirtu kawng' tih hlaa 'Lum par tlan' tih hla thu awmzia chu –	
KEY : Nuam chen	
Distraction 1 : A lum laia awm	
Distraction 2 : Pangpar mawi tak	
Distraction 3 : Mei lum ai	

MCQ : 5

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : Mizo pipute thlang an tlak dan indawt dan chu – <ol style="list-style-type: none"> 1. Hukaung Valley 2. Kawlphai 3. Kansu bial 4. Mizoram 	
KEY : 3, 2, 1, 4	
Distraction 1 : 2, 4, 3, 1	
Distraction 2 : 1, 2, 3, 4	
Distraction 3 : 4, 2, 1, 3	

MCQ : 1

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Apply	CONTENT DOMAIN : Grammar
LEARNING OUTCOME : Uses grammatical items appropriate to the context in speech and writing.	
ITEM STEM : “Kutkem nei” tih hi tawng upain –	
KEY : Rukruk hmang	
Distraction 1 : Kut tiche reng	
Distraction 2 : Kheuh neuh neuh	
Distraction 3 : Kut te reuhte nei	

MCQ : 2

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Evaluate	CONTENT DOMAIN : Poetry (Hla)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : ‘Zirtu kawng’ hlain min kawhhmuh a tum chu	
KEY : Zirlai a hmatlama zir	
Distraction 1 : Zirlai huaisen nih	
Distraction 2 : Zing thawhhma	
Distraction 3 : Thuawih	

MCQ : 3

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Apply	CONTENT DOMAIN : Grammar
LEARNING OUTCOME : Uses grammatical items appropriate to the context in speech and writing.	
ITEM STEM : A hnuaia sentence-ah hian Adjective of quality chu	
KEY : Tui thianghlim tak a luang.	
Distraction 1 : Tui bucket thum kan nei.	
Distraction 2 : Tui tlemte ka in.	
Distraction 3 : Kha laia tui kha min laksak teh.	

MCQ : 4

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Analyse	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Analyses and appreciates a point of view or cultural experiences as reflected in the text, presents orally or in writing.	
ITEM STEM : Kawlphaia mizo pi pute an awm laia rorelna fel tak a awm loh avanga Mizote nuna nghawng a neih chu –	
KEY : Hman inpumkhatna a chhia.	
Distraction 1 : Sakhaw mumal an nei ta lo.	
Distraction 2 : Lal neih an duh.	
Distraction 3 : Silhfen an tlachham.	

MCQ : 5

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : Hmanlai Zawlbuka inzirtirna leh tunlai school-a inzirtirna inanna chu	
KEY : Nungchang	
Distraction 1 : Sa kah dan	
Distraction 2 : Lo vah dan	
Distraction 3 : hmeichhia leh mipa awm dan tur.	

MCQ : 6

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Poetry (Hla)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : 'Zirtu kawng' tih hlaa 'Zun par tlan' tih hla thu awmzia chu	
KEY : Nuam chen	
Distraction 1 : A lum laia awm	
Distraction 2 : Pangpar mawi tak	
Distraction 3 : Mei lum ai	

MCQ : 7

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : Mizo pipute thlang an tlak dan indawt dan chu – 1. Hukaung Valley 2. Kawlphai 3. Kansu bial 4. Mizoram	
KEY : 3, 2, 1, 4	
Distraction 1 : 2, 4, 3, 1	
Distraction 2 : 1, 2, 3, 4	
Distraction 3 : 4, 2, 1, 3	

MCQ : 1

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Apply	CONTENT DOMAIN : Grammar
LEARNING OUTCOME : Uses grammatical items appropriate to the context in speech and writing.	
ITEM STEM : A hnuaia sentence-ah hian Adverb of Manner chu –	
KEY : Chak thain kal rawh.	
Distraction 1 : Tho vat rawh.	
Distraction 2 : Pawnah chhuak suh.	
Distraction 3 : A vin hlar mai.	

MCQ : 2

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Evaluate	CONTENT DOMAIN : Poetry (Hla)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : 'Zirtu kawng' hlain min kawhhmuh a tum chu	
KEY : Zirlai a hmatiam a zir	
Distraction 1 : Zirlai huaisen nih	
Distraction 2 : Zing thawhhma	
Distraction 3 : Thuawih	

MCQ : 3

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Poetry (Hla)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : 'Zofate Inpumkhatna' tih hlaa 'mausam' tih hla thu awmzia chu –	
KEY : A hnawl	
Distraction 1 : Mihring	
Distraction 2 : Inthen	
Distraction 3 : Mau lian tak	

MCQ : 4

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently	
ITEM STEM : Hmalai Zawlbuka inzirtirna leh tunlai school a inzirtirna inanna chu –	
KEY : Nungchang	
Distraction 1 : Sa kah dan	
Distraction 2 : Hmeichhia leh mipa awm dan tur	
Distraction 3 : Eizawnna	

MCQ : 5

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Analyse	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Analyses and appreciates a point of views or cultural experiences as reflected in the text, presents orally or in writing.	
ITEM STEM : Kawlphaia mizo pi pute an awm laia rorelna fel tak a awm loh avanga Mizote nuna nghawng a neih chu –	
KEY : Hnam inpumkhatna a chhia	
Distraction 1 : Silhfen an tlachham	
Distraction 2 : Lal tha neih an duh	
Distraction 3 : An sakhua a mumal ta lo	

MCQ : 1

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Drama
LEARNING OUTCOME : Read, Comprehends and response to complex text independently.	
ITEM STEM : Remhriaa ka nih hi titu chu	
KEY : Lalnghaka	
Distraction 1 : Neihthanga	
Distraction 2 : Rothangliana	
Distraction 3 : Ramliana	

MCQ : 2

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Apply	CONTENT DOMAIN : Grammar
LEARNING OUTCOME : Uses grammatical items appropriate to the context in speech and writing.	
ITEM STEM : Bazar tih hi verb a hman dan chu	
KEY : Ka bazar	
Distraction 1 : Bazarah ka kal	
Distraction 2 : Bazarah ka lei	
Distraction 3 : Bazarah ka hmu che	

MCQ : 3

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Analyse	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Analyses and appreciates a point of view or cultural experiences as reflected in the text; presents orally or in writing.	
ITEM STEM : Kawlphaia Mizo pi pute an awm laia rorelna fel tak a awm loh avangin Mizote nuna nghawng a neih chu	
KEY : Hnam inpumkhatna a chhia	
Distraction 1 : Sakhaw mumal an nei ta lo	
Distraction 2 : Lal neih an duh	
Distraction 3 : Silhfen an tlachham	

MCQ : 4

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Apply	CONTENT DOMAIN : Grammar
LEARNING OUTCOME : Uses grammatical items appropriate to the context in speech and writing.	
ITEM STEM : A hnuaia sentence-ah hian Abjective of quality chu	
KEY : Tui thianghlim tak a luang	
Distraction 1 : Tui bucket thum kan nei	
Distraction 2 : Tui tlemte ka in	
Distraction 3 : Kha laia tui kha min laksak teh.	

MCQ : 5

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Poetry (Hla)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently.	
ITEM STEM : 'Zofate inpumkhatna' tih hlaa sam ang then tih hla thu awmzia chu	
KEY : Inthen	
Distraction 1 : Nupa inthen	
Distraction 2 : In hau	
Distraction 3 : Tangthen	

MCQ : 6

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Prose (Thu)
LEARNING OUTCOME : Read, Comprehends and response to complex text independently.	
ITEM STEM : Kan piputen pialral kal an chak chhan ber chu	
KEY : Faisa rin der der	
Distraction 1 : An chhungte thi tawh hmuh an chak	
Distraction 2 : Awm awl leh ei tui	
Distraction 3 : A hmun a nawm hmel.	

Short Answer : CR – 1

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN :
COMPETENCY : Uses language appropriate to social context, expresses agreements and disagreement with reasons and arrives at conclusions through discussion and debate.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 2	
ITEM STEM : ‘Ral a lian e’ tih ziaktuin kan zaa chungah a innghat ta a tih kha han sawi teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : Ralin khua an run a, mi tam takin an thih phah angina, zu, ruihhlo, HIV?AIDS avangin mi tam takin an thih phahin thihna a la thlen zel dawn a heng hian ral angina min run mek a, he ral hlauhawm tak lak atanga ram leh hnam chhanhim hi kan zaa chungah innghat a ni,	

Short Answer : CR – 2

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Evaluate	CONTENT DOMAIN :
COMPETENCY : Analyse a literary text by a close reading, critiquing form and style and interpreting possible meaning	
LEARNING OUTCOME : Read stories and literary texts, both fiction and non-fiction, with understanding for pleasure and enjoyment and discusses about these.	
MARKS : 3	
ITEM STEM : Kawlphaia kan pipute an awm laia rorelna fel tak awm lovin mizote nuna nghawng a neih zuite han sawi teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : Mizote kawlpai an chhuahsan dawn hian hlauh neia chhuak an nih avangin fel taka rorel awm lovin a rem rem inkawpin an chhuak tawpa chu chuan nghawng thui tak a nei zui a chungte chu : <ol style="list-style-type: none"> 1. Inpumkhatna tha taka khawsa hote an inthen darh. 2. Mizote Manipur, Tripura leh Bangladesh-ah te an awm darh a thlahtu thuhmun nisi, hnam hrang ang main an awm. 3. An awm hran tak avangin zawi zawiin an tawng a lo danglam ta a, inbiakpawhnaah pawh harsatna a thlen a ni. 	

Short Answer : CR – 3

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Evaluate	CONTENT DOMAIN :
COMPETENCY : Provides facts and background knowledge in areas such as science and social science and presents view point based on those facts.	
LEARNING OUTCOME :	
MARKS : 3	
ITEM STEM : Tunlai hnuah Zawlbuk awm leh dawn ta se harsatna awm thei tur kawng 3 han sawi teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : Tunlai hnuah Zawlbuk awm leh dawn ta se harsatna awm thei tur chu: <ol style="list-style-type: none"> 1. Eizawnnate/Nunphung a danglam tawh avangin zawlbuka riak duh an awm tawh lovang. 2. Zawlbuka an zir thinte hmun dangah an aia thaa zir theihna a awm tawh. 3. Enkawh leh venhimna lamah harsatna a awm thei. 	

Short Answer : CR – 4

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Apply	CONTENT DOMAIN :
COMPETENCY : Writes the different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others.	
LEARNING OUTCOME :	
Reads, writes paragraph based on visual or verbal clues, textual inputs etc.	
MARKS : 5	
ITEM STEM : A hnuah thupui hmang hian essay thumal 200 – 250 velin zia the.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : <ol style="list-style-type: none"> 1. Essay thupui hawrawppuiin 2. Introduction/Thuhma 3. Mizo tawng tluang pangngai 4. Punctuation 5. Thupui a lut fuh em? 6. Paragraph felt akin then tur. 7. A tlem berah paragraph 3 tal (Intro/body/conclusion) 8. Handwriting nalh/felfai 9. Words/essay sei zawng ngaihpawimawh tur. 	

Short Answer : CR – 5

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN :
COMPETENCY : Identifies and appreciates different forms of literature such as samples of Prose, Poetry and drama (early to contemporary)	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently	
MARKS : 2	
ITEM STEM : Mahriak ten a rang ka vai e Parte tih hla phuahtuin eng vangin nge ‘Ar ang ka vai e’ a tih.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : He hla phuahtu Lalzova hi a bialnu hmun hla takah a awm avangin hnemtu a neih loh avangin mal ngawih ngawihin a in hria a, chuang chuan ‘Ar ang ka vai e’, a ti a ni.	

Short Answer : CR – 1

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Prose
COMPETENCY : C-2.2 Analyse a literary text by a close reading, critiquing form and style and interpreting possible meaning	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 2	
ITEM STEM : Mizote hnam zahawm taka kan chhuah theih dan tur in zirlaiin a sawi kha han sawi ve teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE :	
<ol style="list-style-type: none"> 1. Hnam dang kan en thniam ve fo thin tam tak an dinhmun tak tak thlira keini aia hniam silote tawngkam leh rilru ringawta hniamtir lovin, nihna leh dinhmunah anni aia thaa ding turin an thawh peih ang mai nilo, anni aia nasain thawk peih ve ang u. 2. Taima takin thawk ila, hnam dang hmusit lovin an thawh aia tam I thawk ang u. 	

Short Answer : CR – 2

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understanding	CONTENT DOMAIN : Prose (Thu)
COMPETENCY : C-2.2 Analyse a literary text by a close reading, critiquing form and style and interpreting possible meaning.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 2	
ITEM STEM : 'Tih dan tha' in zirlaiin "Kristiante tih awm a ni lo" a tih kha han sawi the.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE :	
<ol style="list-style-type: none"> 1. Zahmawh rawng kaia mi chhaih leh titi nana hmanga nuih vak vak chin hi a changkang lova. 2. Thiante sap tawng tih dik loh sawi chhuah chin a, nuihzat chin hi a tha lo. 	

Short Answer : CR – 3

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Prose (Thu)
COMPETENCY : C-2.2 Analyse a literary text by a close reading, critiquing form and style and interpreting possible meaning.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 2	
ITEM STEM : HIV/AIDS hlauhawmzia han sawi the.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : A dik pahnih thlang chhuak rawh. <ol style="list-style-type: none"> 1. A inkaichhawn theih. 2. A tihdamna a awm lo. 3. Midangte bula awm a thiangelo. 4. Drugs an ngai zui thin 	

Short Answer : CR – 4

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understanding	CONTENT DOMAIN : Prose (Thu)
COMPETENCY : C-2.2 Uses language appropriate to social context, expresses agreements and disagreement with reasons and arrives at conclusions through discussion and debate.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 3	
ITEM STEM : “Ral a lian e!!” tih in zirlai atang khan ruihhlo ngaite an sawi dan hrang hrang leh a sawitute kha han sawi teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : A dik pahnih thlang chhuak rawh. <ol style="list-style-type: none"> 1. Social worker-te chuan – mi vanduai, humsual dai anti. 2. Thuhrlitu thenkhat chuan – Piangthar lo an ti. 3. An chenpui, an chhungkua te chuan – thuawih lo, thatchhia an ti. 	

Short Answer : CR – 5

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understanding	CONTENT DOMAIN : Poetry (Hla)
COMPETENCY : C-1.2 Writes the different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 5	
ITEM STEM : 'Zo bawm tu Chhawkhlel par' phuahtu H. Lalringa'n Chhawkhlel par kha eng chen nge vul se a di h sawi la, a duh chhan sawi baw k ang che. He hlain Chhawkhlel par a sawi mawi thiamzia a hla behchhanin han sawi teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : 'Zo bawmthu Chhawkhlel par' phuahtu H. Lalrina'n Chhawkhlel par chu kum tluana par turin a duh a ni. Kum tluana par tura a duh chhan chu, kim tluan in Mizoram timawi se a duh a ni. Thing dangte, pangpar chi hrang hrangte an par a, par mawi tak takte pawh awm mahse Chhawkhlel par aia mawi a awm chuang reng reng lo a ni. Chhkawhlel a par hun lai chuan, Chhawkhlel par tamna hmun Phawngpui tlang sangah pawh nilenga awm hial mawi pawh a chakawmin, chhawkhlel par chu savate pawhin an ngainat leh an riahchilh hial a ni. Chhawkhlel par chu siamtu Pathianin a bik taka a siam a ni a. A vul chhung hi a reilo lutuk a, kum tluanin par mai se, Mizoram pawh a timawi deuh mai tur. Hmanah Chhura'n a sen reng reng hlauh tura min lo zirtir pawh dodal hialna turin Chhawkhlel par sen mawi tak mai hi chu hlauh tur ani lo a ni.	

Short Answer : CR – 1

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Prose (Thu)
COMPETENCY : Uses language appropriate to social context, expresses agreements and disagreement with reasons and arrives at conclusions through discussion and debate.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 2	
ITEM STEM : Mihring ah HIV/AIDS natna hi engtin nge a lan chhuah.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : Mihring taksa a HIV/AIDS natna a lan chhuah dan tlangpui chu, an taksa a chau ngawih ngawih a. Eng natna pawh lo kai se, hritlang emaw pneumonia pawh ni se, a reh mai thei thin lo. An taksa a natna do tu kha HIV hrik te khan an lo ei ral thin a. An natna a zual zel a, thihna hial a thlen thei thin a ni.	

Short Answer : CR – 2

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Rapid reader (Khawnglung Run)
COMPETENCY : Scripts to inform and communicate ideas effectively with the use of technology.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 3	
ITEM STEM : Khawnglung Run in zir atang khan Chala leh Thangite an in hmangaihna a nasat zia kha i hriatthiam danin han ziaak teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : Khawnglung Run bu kan zir atang hian Chala leh Thangi hi an in hmangaihna a nasa hle tih a hriat theih a ni. Chala khan Thangi a hmangaih em avangin sala an manna khua pawh hre Chiang lo khan Thangi zawng chhuak turin a ‘ar khaw chhuah’ ve tawp mai a ni. Chala faru pahni te pawh ral ho khan sal atan an man ve tho naa, Chala tum ber chu Thangi zawn chhuah kha a ni ber mai a ni. Thangi lah khan ral ram atang khan Chala chu a ngai em em mai a, amah chu arawn zawn chhuah te a lo ring hial bawk a ni. Thangi rin ang ngeiin Chala pawh chuan Thangi chu a zawng chhuak ta ngei a. Harsatna tam tak a paltlang bawk a ni. He tiang a nih avang hian Chala leh Thangi inhmanngaihna chu a nasa in a thuk hle a ni tih a hriat theih a ni.	

Short Answer : CR – 3

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Evaluate/Apply	CONTENT DOMAIN : Writing (Essay)
COMPETENCY : Writes in different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others.	
LEARNING OUTCOME : Reads, paragraphs, articles and verbal clues etc.	
MARKS : 5	
ITEM STEM : A hnaua thupui hmang hian thumal 200 – 250 velin essay han ziaak teh. ‘TLAWMNGAIHNA’	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : <ol style="list-style-type: none"> 1. A thupui hawrawppui 2. Tlawmngaihna awmzia 3. Tlawmngaihna lan chhuahtir dan tur. 4. Tlawmngaihna hmun leh hmanna hun tur. 5. Hand writing, punctuation leh spelling 6. Tlangkawmna. 	

Short Answer : CR – 4

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Poetry (Hla)
COMPETENCY : Uses language appropriate to social context, expresses agreements and disagreement with reasons and arrives at conclusions through discussion and debate.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 2	
ITEM STEM : A hnuaia hla thu hi zo tawng tluang pangngaiin dah rawh. 'Kawltu chawi nun iang chu zirlaite. Kawl ni chhuak chhiar zai rel ve ta'ng le.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : Thuthlawha hlo thlo thinte nun ang chu zirlaite hi an ni a, nitin, tuktin, I thawk chhuak ve thin an u le.	

Short Answer : CR – 5

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Remember	CONTENT DOMAIN : Prose (Thu)
COMPETENCY : Uses language appropriate to social context, expresses agreements and disagreement with reasons and arrives at conclusions through discussion and debate.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently	
MARKS : 2	
ITEM STEM : 'Thalaite kawvel' tih ziaktuin a lehkhah zirpuite thu vuakthlak dan a sawi kha han ziaak teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : America ram thalai tam takte thu vaukthlak dan chu. "Ka mamawh leina tur eng emaw zat hmuh ka tum ang a; ka indaih lohna chu ka nu leh pate tanpuina pawh ka dil mai ang" an ti thin a ni. An chhungte pur buai lova zir an tum tlat a ni.	

Short Answer : CR – 1

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Prose (Thu)
COMPETENCY : Uses language appropriate to social context, expresses agreements and disagreement with reasons and arrives at conclusions through discussion and debate.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 2	
ITEM STEM : 'Ral a lian e' tih inzir atangin HIV/AODS veite an inpuan hian engtiangin nge kan lo dawnsawn ang?	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : HIV/AIDS veite hian hreawm anti em em a, tanpuitu an mamawh a ni tih hriat a pawimawh. An inpuan hnua thinhrikna rilru hi paih a, anmahni chhawmdawl leh tanpui hi mi danga a darh zel lohna tura invenna tangkai berte zinga mi a ni.	

Short Answer : CR – 2

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Create	CONTENT DOMAIN : Writing
COMPETENCY : Writes in different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others.	
LEARNING OUTCOME : Write, paragraphs based on verbal clues.	
MARKS : 5	
ITEM STEM : A hnuaia thupui hmang hian thumal 200 – 250 hmangin Essay han ziaik teh. 'Hnam inpumkhatna'	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : <ol style="list-style-type: none"> 1. Essay thupui capital letter-in a ziaik ang. 2. Paragraph-in a thuziak a tan ang. 3. Punctuation a ngai pawimawh ang. 4. Essay thupui paragraph hmasa berah a hrilhfiah ang. 5. Hnam inpumkhat tulna 6. Hnam inpumkhatna daltute 7. Hnam inpumkhatna tura hma lak dan tur. 8. A tlangkawmna 	

Short Answer : CR – 3

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Rapid Reading
COMPETENCY : Writes in different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others.	
LEARNING OUTCOME : Reads, comprehends and responds to complex texts independently	
MARKS : 3	
ITEM STEM : ‘Khawnglung run’ inzir atangin Mizo khawtlang nuna inthenawm khawven nawmzia leh thlamuanthlakzia han sawi teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : Thangi zawng tura Chala a kal atang khan Chala nu chu a khua a har thei hle a. A rilru a hahin Chala a ngaihtuah thei hle. Mut pawh a hmu ngai mang lova. A chang chuan a tap bawh thin. A tap thawm hriain thenawm te an lo chuangkaia a, a khawhar an hnem thin. Thangi te inah lengin Thangi nen an inkawmhlaim bawh thin. Zan sarih a ral hnu pheii chuan an thenawm, hnaivai te an inah Chala nu hnem turin an kal fo thin. An thenawm khawvengte pawhin Chala te lo haw hma chuan Chala nu chu an lo kawm hlimin anlo thutpui, an hnem a, an tawng thlamuan thin a ni.	

Short Answer : CR – 4

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Understand	CONTENT DOMAIN : Poetry (Hla)
COMPETENCY : Uses language appropriate to social context, expresses agreements and disagreement with reasons and arrives at conclusions through discussion and debate.	
LEARNING OUTCOME : Read, comprehends and responds to complex text independently.	
MARKS : 2	
ITEM STEM : ‘Chhul khat kual’ tih hla thu behchhanin zofate inpumkhat tulna Mizo tawng mawi takin han ziaik teh.	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : Zofate hi hnam tlemte kan ni a, hmun hrang hrangah awm ma hila kan hnam nunmawi hi chawisang zel ila. Kan pi leh puten thian chhan thih an ngam ang khan, Mizo hnam chhan nan theihtawp chhuah zel ila. Inthural taka kan awm chuan kan hnam a him ang a. Zofate kan lo inpumkhat leh zual dawn a ni.	

Short Answer : CR – 5

CLASS : 10	SUBJECT : MIZO
COGNITIVE LEVEL : Apply	CONTENT DOMAIN : Writing
COMPETENCY : Writes in different styles (narrative, descriptive, expository, persuasive) from their own experiences and experiences of others.	
LEARNING OUTCOME : Write personal, official and business letters, articles, debates, paragraphs based on visual or verbal clues, textual inputs etc.	
MARKS : 3	
ITEM STEM : Zokhawthar YMA Secretary i ni a, mi tu tih hriat loh ten in veng, YMA Run an rawk a, bungrua engemaw zat an la a. He mi chungchangah hian Champhai Police station-ah First Information Report thehluk tur han ziah teh. (I hming chu : Lala, Champhai)	
MARKING SCHEME :	
EXPECTED STUDENT RESPONSE : <ol style="list-style-type: none">1. FIR thehlukna tur Address ziah dik tur.2. Subject ziah lan tur.3. Thil thlen dan kim chang takin ziah lan tur.4. A diltu/FIR thehluttu hming leh Address ziah tur.5. Date ziah tur.	

Item Bank – Science
Mizoram Board of School Education (MBSE), Mizoram

This item bank contains 111 questions, including multiple-choice questions (MCQs) and constructed response (CR) questions, designed for grade 10. These items align with the competency-based framework outlined in NEP 2020 and NCF-SE 2023. They are mapped to various cognitive levels—Remember, Understand, Apply, Analyze, Evaluate, and Create -as per the revised Bloom's Taxonomy.

Items have been designed in reference to the quality parameters such as validity, reliability, and fairness. Detailed marking schemes are provided for all CR items, including considerations for alternative answers and their corresponding value points. This item bank is intended for use by both teachers and students.

Summary Table:

Content Domain	Remember	Understand	Apply	Analyse	Evaluate	Create	Total no. of items
Physics	02	17	10	02	01	-	32
Chemistry	04	22	03	03	-	-	32
Biology	04	37	04	01	-	01	47
Grand Total							111

Physics

Item: 1

<i>Class</i>	10	<i>Subject</i>	Physics
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Light- Reflection and refraction
<i>Competency</i>	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		

Learning Outcome	Explains image formed by concave lens
Item stem	Consider the below Assertion (A) and Reason (R) statements: Assertion (A): A concave lens always produces virtual and erect image Reasoning (R): The focal length of a concave lens is always negative. Select the correct option from the given alternatives
Key	Both (A) and (R) are true, but (R) is not the correct explanation of (A)
Distractor 1	Both (A) and (R) are false
Distractor 2	Both (A) and (R) are true, and (R) is the correct explanation of (A)
Distractor 3	(A) is false but (R) is true

Item: 2

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Light- Reflection and Refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Explains the relation between focal length and power of a lens		
Item stem	If the focal length of lens A is twice the focal length of B, then the power of lens B is		
Key	Twice the reciprocal of focal length of A		
Distractor 1	Twice the focal length of A		
Distractor 2	Twice the focal length of B		
Distractor 3	Twice the reciprocal of focal length of B		

Item: 3

Class	10	Subject	Physics
Cognitive level	Apply	Content Domain	Light- Reflection and refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Determines the characteristics of the image w.r.t. the position of the object		
Item stem	An object is placed 15 cm away from convex lens of focal length 10 cm. If the object is further displaced 5 cm from its position away from the lens, the size of the image becomes		
Key	Same as the object		
Distractor 1	Diminished to half		
Distractor 2	Magnified twice		
Distractor 3	Magnified thrice		

Item: 4

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Light- Reflection and refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Relates the configuration of lenses to the practical applications		
Item stem	<p>Consider the following configurations of lenses in the form of statements:</p> <p>Configuration A - An object is placed at the midpoint of the focal length of a convex lens.</p> <p>Configuration B - An object is placed at a distance equal to twice the radius of curvature of a concave lens.</p> <p>Which of the following is true about the above configurations?</p>		

Key	‘A’ only can be used in optical microscopes and in magnifying lens
Distractor 1	‘A’ can be used in magnifying lens and B can be used in optical projectors
Distractor 2	‘A’ can be used in optical projectors and B can be used in magnifying lens
Distractor 3	‘B’ only can be used in optical microscopes and in magnifying lens

Item: 5

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Light- Reflection and refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Derives the relationship between various parameters of lens		
Item stem	If the radii of curvatures of two convex lenses A and B are 10 cm and 100 cm respectively, then:		
Key	Thickness of lens A is more than the thickness of lens B		
Distractor 1	Thickness of a lens is independent of its radius of curvature		
Distractor 2	the thickness of lens A is equal to thickness of B		
Distractor 3	Thickness of lens A is less than thickness of B		

Item: 6

Class	10	Subject	Physics
Cognitive level	Remember	Content Domain	Human Eye and the Colourful world
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Describes the characteristics of image formed in human eye.		
Item stem	When a ray of light passes through the human eye. It forms:		
Key	a real and inverted image on the retina		
Distractor 1	a real and erect image on the retina		
Distractor 2	a virtual and inverted image on the retina		
Distractor 3	a virtual and erect image on the retina		

Item: 7

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Human Eye and the colourful world
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Explains the dispersion of light through a prism		
Item stem	Consider the following Assertion and Reason statements: Assertion (A): Prism disperses white light into its seven constituent colours. Reason (R): Light of different wavelength travels with different speed in a medium. Choose the correct option from the given alternatives.		
Key	Both (A) and (R) are true, and (R) is the correct explanation of (A)		
Distractor 1	Both (A) and (R) are true, and (R) is not the correct explanation of (A)		
Distractor 2	(A) is true but (R) is false		
Distractor 3	(A) is false but (R) is true		

Item: 8

Class	10	Subject	Physics
Cognitive level	Remember	Content Domain	Human Eye and the colourful world
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Explain the spectrum of white light		
Item stem	Consider the below Assertion (A) and Reason (R) statements: Assertion (A): When white light is passed through a prism, red colour deviates the most and violet deviates the least. Reason (R): The angle of deviation increases with increase in wavelength. Select the correct option from the given alternatives.		
Key	Both (A) and (R) are false		
Distractor 1	Both (A) and (R) are true, but (R) is not the correct explanation of (A)		
Distractor 2	Both (A) and (R) are true, and (R) is the correct explanation of (A)		
Distractor 3	(A) is false but (R) is true		

Item: 9

Class	10	Subject	Physics
Cognitive level	Apply	Content Domain	Human Eye and the Colourful world
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Differentiates between myopic and hypermetropic eye defect.		
Item stem	Mawia has a vision defect, he cannot clearly see the writings on the whiteboard from the last bench. What kind of lens should Mawia use to correct his vision? (i) Convex lens (ii) Concave lens (iii) Plano convex		
Key	Only (ii)		
Distractor 1	Only (i)		
Distractor 2	Both (ii) and (iii)		
Distractor 3	Both (i) and (iii)		

Item: 10

<i>Class</i>	10	<i>Subject</i>	Physics
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Human Eye and the Colourful world
<i>Competency</i>	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
<i>Learning Outcome</i>	Relates the parts of human eye with its function		
<i>Item stem</i>	Match the parts of the human eye in Column I with their correct functions in Column II		
	Column I	Column II	
	a. Cornea	(i) changes focal length of eye lens	
	b. Pupil	(ii) have enormous light sensitive cells	
	c. Ciliary muscles	(iii) controls the amount of light entering the eye	
	d. Retina	(iv) Refraction of light entering the eye	
<i>Key</i>	a-iv, b-iii, c-i, d-ii		
<i>Distractor 1</i>	a-iv, b-i, c-iii, d-ii		
<i>Distractor 2</i>	a-ii, b-i, c-iv, d-iii		
<i>Distractor 3</i>	a-ii, b-iii, c-i, d-iv		

Item: 11

Class	10	Subject	Physics
Cognitive level	Analyse	Content Domain	Human Eye and the Colourful world
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Differentiates between myopic and hypermetropic eye defect.		
Item stem	Mawia has a vision defect, he cannot clearly see the writings on the whiteboard from the last bench although he has no trouble reading his textbook when kept close. He googles about his condition and orders for a convex lens to correct his distant vision. Which among the following is likely to happen after the persistent use of convex lens?		
Key	His distant vision would become blurrier		
Distractor 1	There would not be any noticeable change in vision		
Distractor 2	His distant vision improves significantly		
Distractor 3	His near vision improves significantly		

Item: 12

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Electricity
Competency	C-2.4: Manipulates and analyze different characteristics of circuit (current, voltage, resistance) and mathematises their relationship (Ohm's law) and applies it to everyday usage (electricity bill, short circuit, safety measures)		
Learning Outcome	Explain the factors affecting resistance of the material.		
Item stem	<p>The resistivity of three different materials is given below.</p> <p>A: $3.4 \times 10^{-8} \Omega \cdot m$</p> <p>B: $1.6 \times 10^{-6} \Omega \cdot m$</p> <p>C: $5.0 \times 10^{12} \Omega \cdot m$</p> <p>Which among the following options are true w.r.t the materials?</p>		
Key	A is a conductor and C is an insulator		
Distractor 1	A is an insulator and B is a conductor		
Distractor 2	C is a conductor and B is an insulator		
Distractor 3	A is an insulator and C is a conductor		

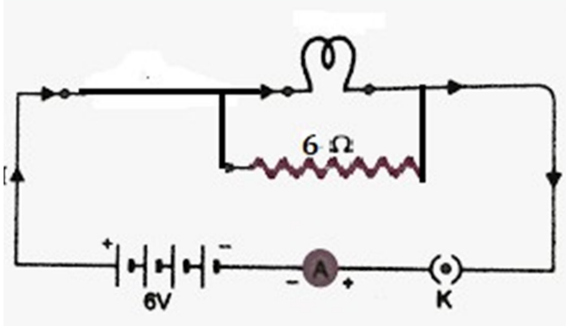
Item: 13

Class	10	Subject	Physics
Cognitive Level	Understand	Content Domain	Electricity
Competency	C-2.4: Manipulates and analyse different characteristics of circuit (current, voltage, resistance) and mathematise their relationship (Ohm's law) and applies it to everyday usage (electricity bill, short circuit, safety measures)		
Learning Outcomes	Relates the electrical conductivities of the materials to its applications		
Item Stem	<p>Consider the below Assertion (A) and Reason (R) statements:</p> <p>Assertion(A): Tungsten is used as a filament in electric bulb</p> <p>Reason(R): Tungsten has the less resistance for the current.</p>		
	Select the correct option from the given alternatives		
Key	(A) is true but, (R) is false		
Distractor 1	Both (A) and (R) is false		
Distractor 2	Both (A) and (R) are true, but (R) is not the correct explanation to (A)		
Distractor 3	Both (A) and (R) are true and (R) is the correct explanation to (A)		

Item: 14

Class	10	Subject	Physics
Cognitive Level	Understand	Content Domain	Electricity
Competency	C 2.4 Manipulates and analyze different characteristics of circuit (current, voltage, resistance) and mathematise their relationship (Ohm's law) and applies it to everyday usage (electricity bill, short circuit, safety measures)		
Learning Outcomes	Establishes the relation between power and electrical energy.		
Item Stem	How much power would generate 0.75KJ of electric energy in 1 minute?		
Key	12.5 W		
Distractor 1	45 W		
Distractor 2	$12.5 \times 10^3 \text{ W}$		
Distractor 3	450 W		

Item: 15

Class	10	Subject	Physics
Cognitive Level	Apply	Content Domain	Electricity
Competency	C-2.4: Manipulates and analyse different characteristics of circuit (current, voltage, resistance) and mathematises their relationship (Ohm's law) and applies it to everyday usage (electricity bill, short circuit, safety measures)		
Learning Outcomes	Calculates current, voltage and equivalent resistance of the given circuit.		
Item Stem	 <p>In the above given circuit, the resistance of the given bulb is 30 ohms, then what is the total current 'I' flowing through the circuit?</p>		
Key	1.2 A		
Distractor 1	0.84 A		
Distractor 2	1 A		
Distractor 3	3 A		

Item: 16

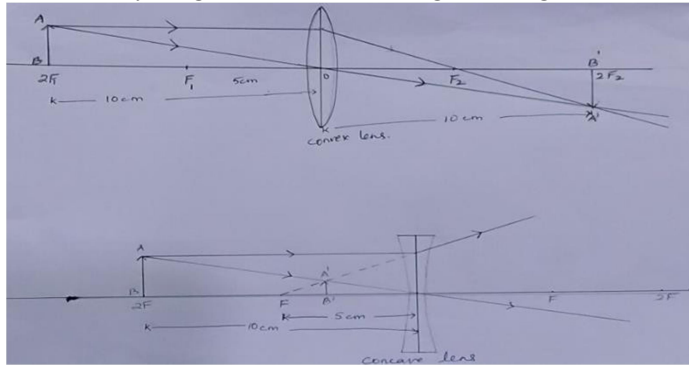
Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Sources of Energy
Competency	C-7.1 States concepts that represent the most current understanding of the matter being studied ranging from mere familiarity to conceptual understanding of the matter as appropriate to the developmental stage of the students		
Learning Outcome	Explains the characteristics and environmental impact of tidal energy.		
Item Stem	<p>Consider the statements (A) and (B) about renewable energy and choose the correct answer.</p> <p>Statement (A): Tidal energy is a sustainable and inexhaustible source of energy.</p> <p>Statement (B): Tidal energy leads to significant water pollution</p>		
Key	(A) is true, (B) is false.		
Distractor 1	(A) is false, (B) is true.		
Distractor 2	Both (A) and (B) are true.		
Distractor 3	Both (A) and (B) are false.		

Item: 17

Class	10	Subject	Physics
Cognitive level	Apply	Content Domain	Light- Reflection and Refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Applies the lens formula and rules for formation of image by lenses		
Marks	4		
Item stem	<p>Suppose an object which is 2 cm high is placed in front of a convex lens of focal length 5 cm. Now, consider the following situations:</p> <p>(i) the object is 15 cm in front of the lens</p> <p>(ii) the object is 10 cm in front of the lens.</p> <p>Provide answer to the following questions:</p> <p>(a) Find the ratio of the size of the images so formed in the two cases.</p> <p>(b) For situation (ii), use a ray diagram to show the change in the nature of the image when convex lens is replaced by concave lens of same focal length.</p>		
Marking Scheme			
Expected Students Response		Marks	
Part a)			
case(i) $u = -15\text{cm}$, $f = 5\text{cm}$ $v = uf/(u+f) = (-15) \times 5/(-15+5) = 7.5\text{cm}$		0.25 mark even if the unit is not mentioned	
case(ii) $u = -10\text{cm} = -2f$ $v = 10\text{cm}$ (since $u = 2f$, image is at $2f$ on the other side of the lens)		0.25 mark even if the unit and the reason are not mentioned	
case(i) $h_o = 2\text{cm}$, $h_i = v h_o / u = 7.5 \times 2 / -15 = -1\text{ cm}$		1/2 mark even if the unit is not mentioned	
case(ii) $h_o = 2\text{cm}$, $h_i = -2\text{cm}$ (since object placed at $2f$ produces same size of image)		1/2 mark even if the unit and the reason are not mentioned	
The ratio of case(i) h_i to case(ii) $h_i = 1/2$ $-1\text{cm} / -2\text{cm} = 1/2$		1/2 mark even if sign convention is not mentioned	

Pat b)

To draw ray diagrams similar to the given diagram



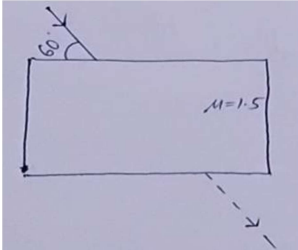
Nature of image in convex lens - real and inverted

Nature of image in concave lens - virtual and erect

Correct ray diagram with or without correct labelling 1/2 each. If the type of lens with correct markings of focus and centre of curvature is provided 0.25 can be awarded.

For writing the correct nature of image, award 1/2 mark each. If only part (either only real or only inverted etc) is correct, 0.25 may be awarded.

Item: 18

Class	10	Subject	Physics
Cognitive level	Apply	Content Domain	Light- Reflection and Refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Describes Snell's law in refraction		
Marks	3		
Item stem	<p>Consider the ray diagram shown in the diagram below</p>  <p>Answer the following questions :</p> <p>a) Calculate the angle of refraction (r). Given $\sin 18^\circ = 0.33$.</p> <p>b) Complete the ray diagram using the calculated value of r and show the lateral shift.</p>		
Marking Scheme			
Expected Students Response			Marks

<p>a)</p> <p>$i=30^\circ$ $\mu=1.5$, $\sin r = \sin i / \mu = 1/2 / 1.5 = 1/3$ or 0.33</p> <p>$r = \sin^{-1}0.33 = 18^\circ$</p>	<p>Correct formula - 0.25 mark</p> <p>Correct substitution of value - 0.25 mark</p> <p>Getting $\sin r = 0.33$ - 0.25 mark</p> <p>Getting $r = 18^\circ$ - 0.25 mark</p> <p>(0.25+0.25+0.25+0.25 = 1 mark)</p>
<p>b)</p> <p>Representing the angle of refraction on the diagram as 18°</p> <p>Showing the lateral shift (d) as the perpendicular distance between the original path and the actual refracted ray.</p>	<p>1/2 mark</p> <p>1/2 mark</p> <p>For complete diagram as given ; 1 mark</p> <p>(1/2 +1/2 +1 = 2 marks)</p>

Item: 19

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Light- Reflection and refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Explains the relation between refractive index, wavelength and speed of light		
Marks	2		
Item stem	The absolute refractive indices of glass and diamond are 1.5 and 2.4 respectively. Determine the ratio of wavelengths of light as it passes from diamond to glass.		
Marking Scheme			
Expected Students Response			Marks
			If only formula $v= c/\mu$ is correct - 0.25mark to be awarded. Otherwise

$\mu_1=1.5, v_1 = c/\mu_1 = 3 \times 10^8 / 1.5 = 2 \times 10^8 \text{m}$ $\mu_2=2.4, v_2 = c/\mu_2 = 3 \times 10^8 / 2.4 = 1.25 \times 10^8 \text{m}$ $v_1 = v \lambda_1 \text{ and } v_2 = v \lambda_2$ $v_1 / v_2 = v \lambda_1 / v \lambda_2$ $\lambda_1 / \lambda_2 = 2 \times 10^8 / 1.25 \times 10^8 = 5/8 = 0.625$	<p>Correct value of v_1 - 1/2 mark</p> <p>Correct value of v_2 - 1/2 mark</p> <p>If unit is not mentioned 0.25 to be deducted.</p> <p>Correct formula for finding ratio - 1/2 mark</p> <p>Final value of the ratio - 1/2 mark</p> <p>(1/2 + 1/2 + 1/2 + 1/2 = 2 marks)</p>
--	--

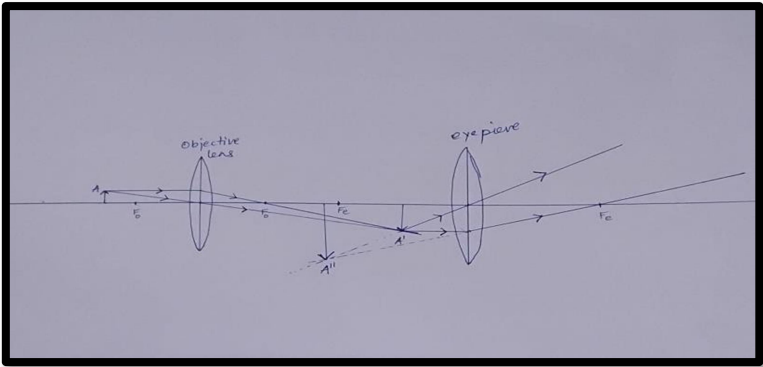
Item: 20

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Light- Reflection and Refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Explains the relation between angle of incidence, angle of refraction and angle of emergence		
Marks	3		
Item stem	Danny studies the refraction of light through a standard glass slab. Consider the scenario where the angle of emergence becomes 90°.		
	(a) What inferences can Danny make about the light's path when this phenomenon occurs? Draw the direction of emergent ray. (1mark) (b) How will the light's behaviour change if Danny increases the angle of incidence beyond this critical value? Explain the underlying reason for this change. (2 marks)		
Marking Scheme			
Expected Students Response			Marks
(a) When the angle of emergence becomes 90°, the emergent ray travels along the line of separation (interface) between the two media.			1/2 mark 1/2 mark Diagram - 1/2 with direction of light ray, reduce 0.25 if direction of ray is not marked.

<p>(b) When Danny increases the angle of incidence beyond this critical value, the light ray will no longer be refracted, instead it will be completely reflected into the glass slab.</p> <p>Snell's law states that the ratio of the sines of the angles of incidence and refraction is equal to the ratio of the velocities of the two media.</p> <p>When the angle of incidence exceeds the critical angle, the angle of refraction becomes complex, leading to total internal reflection.</p>	<p>Award 1/2 mark for Snells law</p> <p>Award 1 mark for the critical angle criteria</p> <p>$1 + 1/2 = 1.5$ mark</p>
--	---

Item: 21

Class	10	Subject	Physics
Cognitive level	Analyse	Content Domain	Light- Reflection and refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Evaluates how two convex lenses work together to form highly magnified image.		
Marks	4		
Item stem	<p>Rina has two convex lenses of focal lengths 10 mm and 20 mm respectively and wants to combine to make a compound microscope. From what he had learnt from image formation by lens, he has figured out the making of a compound microscope.</p> <p>(a) Which one does he use for the objective lens? Why does he prefer?</p> <p>(b) Draw ray diagram showing a magnified image formation by the eye piece when the object is kept between the focus and centre of curvature of the objective lens.</p>		
Marking Scheme			
Expected Response			Marks
<p>Part (a)</p> <p>Rina should use a shorter focal lens for objective lens because the objective lens has to collect light and form real image.</p>			<p>$1/2 + 1/2 = 1$ mark</p> <p>Award 1/2 mark each for the highlighted points.</p>

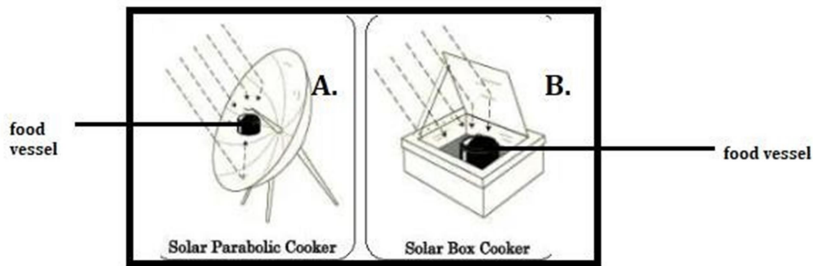
<p>Part (b)</p> 	<p>Representation of objective and eye piece – 1/2 mark</p> <p>Correct positioning of object – 1/2 mark</p> <p>Correct image formation by objective lens – 1 mark</p> <p>Correct image formation by eye piece – 1 mark</p> <p>If no labelling is done, 0.25 each to be deducted.</p>
---	--

Item: 22

<i>Class</i>	10	<i>Subject</i>	Physics
<i>Cognitive level</i>	Evaluate	<i>Content Domain</i>	Light- Reflection and Refraction
<i>Competency</i>	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
<i>Learning Outcome</i>	Explains the relation between angle of incidence, angle of refraction and angle of emergence		
<i>Marks</i>	3		
<i>Item stem</i>	<p>Danny studies the refraction of light through a standard glass slab. Consider the scenario where the angle of emergence becomes 90°.</p> <p>(a) What inferences can Danny make about the light's path when this phenomenon occurs? Draw the direction of emergent ray. (1mark)</p> <p>(b) Explore the scenario, where diamond is used instead of glass in optical fibre systems. Comment on its advantage and disadvantages in terms of light confinement, weight density and cost. [refractive index of diamond = 2.42] (3 marks)</p>		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>

(a) When the angle of emergence becomes 90° , the emergent ray travels along the line of separation (interface) between the two media.	1/2 mark 1/2 mark Diagram - 1/2 with direction of light ray, reduce 0.25 if direction of ray is not marked.
(b) Diamond $\sin C = 1/2.42 \approx 0.4132$ $C = \sin^{-1}(0.4132) \approx 24.4^\circ$. This small critical angle is one of the reasons diamonds sparkle so much—they totally internally reflect light very effectively. <ul style="list-style-type: none"> - Better light confinement - Density and cost is high 	Award 1/2 mark for correct equation Award 1/2 mark for the critical angle value Award 1 mark for connecting smaller critical angle with better light confinement. 1mark

Item: 23

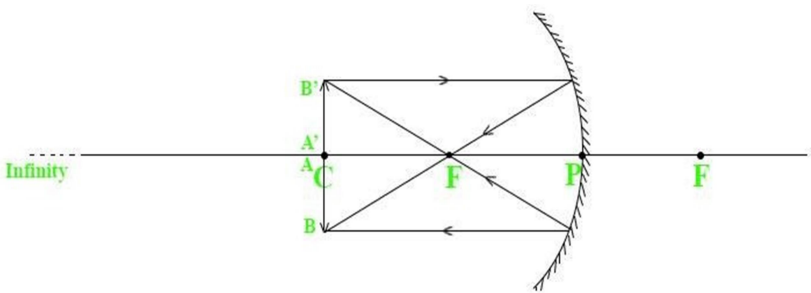
Class	10	Subject	Physics
Cognitive level	Apply	Content Domain	Light – Reflection and Refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Applies the knowledge of reflection by spherical mirror.		
Marks	2		
Item stem	<p>Given below are diagrams of two different models of solar cookers.</p> <div></div> <p>In the above diagram food is kept inside the black vessel shown in the figure, model A uses a spherical mirror and model B uses a plane mirror. Which among the cooker model, A or B cooks food faster? Give reason for your answer</p>		
Marking Scheme:			
Expected Students Response			Marks

<p>Cooker A cooks faster as it uses a concave reflector (spherical mirror) that concentrates sunlight on the vessel better than cooker B which uses a plane mirror</p> <p style="text-align: center;">OR</p> <p>The vessel is kept at the focal point of the spherical mirror in model A</p>	<p>1+1 = 2 M (Award 1 mark for any of the given response)</p>
--	---

Item: 24

Class	10	Subject	Physics
Cognitive level	Apply	Content Domain	Light – Reflection and Refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Applies the knowledge of ray diagram and reflections from a spherical mirror.		
Marks	3		
Item stem	<p>A man is standing in front of a spherical mirror having a radius of curvature 5 feet. The image formed in the mirror is inverted and same size as the object.</p> <p>i. What type of spherical mirror is it?</p>		
	<p>ii. What will be the distance of the image from the mirror. Explain with a simple ray diagram.</p>		

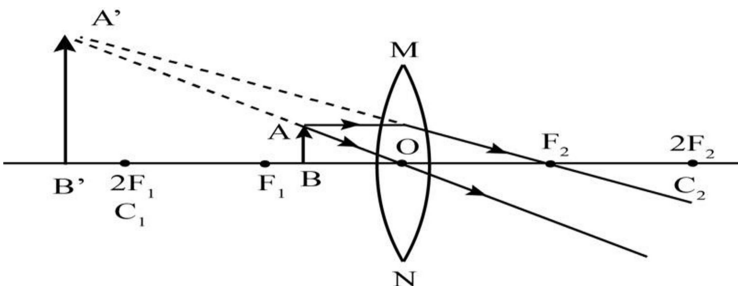
Marking Scheme:

Expected Students Response	Marks
i. concave mirror	1 mark
<p>ii. The distance of the image will be 5feet as well, since image produced is same size as the object.</p> 	<p>½ mark for the image distance</p> <p>½ mark for correct representation of concave mirror</p> <p>½ mark For correct rays with arrows</p> <p>½ mark for representing inverted image on same side as the object</p> <p>½ + ½ + ½ + ½ = 2 marks</p>

Item: 25

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Light – Reflection and Refraction
Competency	C-2.3 Manipulates the position of object and properties of lenses (focus, centre of curvature) to observe image characteristics and correspondence with a ray diagram, and extends this understanding to a combination of lenses (telescope, microscope)		
Learning Outcome	Analyses the characteristics of image formed by different configuration of lenses.		
Marks	3		
Item stem	Danny wants to place an object in front of a convex lens where the lens will be able to form a virtual and an erect image. Where will he place the object? Explain with the help of a diagram.		

Marking Scheme:

Expected Students Response	Marks
i. Between focus and Optic centre of lens	1 mark
ii. When an object is placed very close to the lens, between the focus and the optical centre, a virtual, erect and enlarged image will be formed on the same side as the object.	<p>½ mark – for correct positioning of object</p> <p>½ mark for correct ray s and directions.</p>
	<p>½ mark for showing the magnified image</p> <p>½ mark for correct positioning of the image</p> <p>$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ marks</p>

Item :26

Class	10	Subject	Physics
Cognitive level	Apply	Content Domain	Light – Reflection and Refraction
Competency	C-8.1 Develops accurate and appropriate models (including geometric, mathematical, graphical) to represent real-life events and phenomena using scientific principles and use these models to manipulate variables and predict results.		
Learning Outcome	Applies the knowledge of myopic and hypermetropic eye with the calculation of their corrective lenses.		
Marks	3		
Item stem	Kimi’s eye has a far point of 2m. i. Calculate the focal length of the lens she requires. ii. And what kind of lens should she used to clearly see an object at infinity.		
Marking Scheme:			
Expected Students Response			Marks
i.) $\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$ $= \frac{1}{2} - \frac{1}{\infty}$ $f = -200 \text{ cm}$			2 marks Award ½ mark for the correct formula Award ½ mark for correct substitution with proper sign convention Award ½ mark for value with unit Award ½ mark for ‘-’ sign. $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2 \text{ marks}$
ii.) The negative sign indicates the diverging lens i.e. concave lens			1 mark

Item: 27

Class	10	Subject	Physics
Cognitive level	Understand	Content Domain	Human Eye and the Colourful world
Competency	C-8.1 Develops accurate and appropriate models (including geometric, mathematical, graphical) to represent real-life events and phenomena using scientific principles and use these models to manipulate variables and predict results.		

Learning Outcome	Applies the properties of electromagnetic radiation in daily life scenario	
Marks	2	
Item stem	When a truck carries a pole longer than its body, part of the pole is extended outward from the body, a red cloth or some other red material is used to be hung at the end of the pole. Why?	
Marking Scheme		
Expected Students Response		Marks
Red colour has the longest wavelength among the visible spectrum		1 mark
Red colour scatters the least in a medium		1 mark

Item: 28

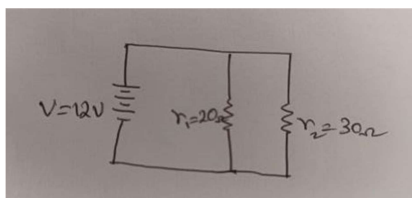
<i>Class</i>	10	<i>Subject</i>	Physics
<i>Cognitive Level</i>	Apply	<i>Content Domain</i>	Electricity
<i>Competency</i>	C-2.4: Manipulates and analyse different characteristics of circuit (current, voltage, resistance) and mathematises their relationship (Ohm's law) and applies it to everyday usage (electricity bill, short circuit, safety measures)		
<i>Learning Outcomes</i>	Calculates the energy consumption for a given combination of electrical devices		
<i>Marks</i>	4		
<i>Item Stem</i>	An electric motor 1/2 hp is used for 2hr everyday while two electric bulbs of 60W each are lit for 4 hours every day. If an electric motor is used only for 1 hour every day in 20 days, what would be its impact on energy consumption?		
<i>Marking Scheme</i>			

Expected Response	Marks
Conversion of horsepower into Watt $1/2 \text{ hp} = 373 \text{ W}$	1/2 mark
Before Change	1/2 mark
Electrical energy consumed by motor in a day = $373 \times 2 = 746 \text{ Wh}$	1/2 mark
Electrical energy consumed by bulbs in a day = $60 \times 4 = 480 \text{ Wh}$	1/2 mark
Total energy consumed in 20 days = $(746 + 480) \times 20 = 24.52 \text{ kWh}$	
After Change	
Electrical energy consumed by motor in one day = 373 Wh	1/2 mark
Electrical energy consumed by motor in 20 days = 7460 Wh	1/2 mark
Total energy consumed in 20 days = 17.060 kWh	1/2 mark
difference in energy consumption = $24.52 - 17.060 = 7.46 \text{ kWh}$.	1/2 mark
	(Award marks if the final answer is expressed in Wh or units)

Item: 29

Class	10	Subject	Physics
Cognitive Level	Understand	Content Domain	Electricity
Competency	C-2.4: Manipulates and analyze different characteristics of circuit(current, voltage, resistance) and mathematises their relationship (Ohm's law) and applies it to everyday usage (electricity bill, short circuit, safety measures)		
Learning Outcomes	Explains Ohm's law		
Marks	2		
Item Stem	<p>According to Ohm's law, current flowing through a conductor is directly proportional to the potential difference provided its temperature remains the same.</p> <p>a) Explain why the temperature should remain the same?</p> <p>b) Will V-I graph obtained always be a straight line for conductors, when Ohm's law is verified experimentally? Justify your answer</p>		

Item: 31

Class	10	Subject	Physics
Cognitive Level	Apply	Content Domain	Electricity
Competency	C-2.4: Manipulates and analyse different characteristics of circuit (current, voltage, resistance) and mathematises their relationship (Ohm's law) and applies it to everyday usage (electricity bill, short circuit, safety measures)		
Learning Outcomes	Calculates power dissipation with respect to change in resistance in a given circuit.		
Marks	4		
Item Stem	A 20 Ω resistor and a 30 Ω resistor are connected in parallel across a 12V battery. If the resistors are heated, their resistances increase by 10% and 20%, respectively. Calculate the percentage change in the total power dissipated by the circuit?		
Marking Scheme			
Expected Response			Marks
<div></div> <p>Total equivalent resistance = $1/R_1 + 1/R_2 = 1/R$ = 12 ohm</p> <p>Power dissipated = $V^2/R = 12\text{W}$</p> <p>After increase by 10%, $r_1 = 22\Omega$ and $r_2 = 36\Omega$</p> <p>Total equivalent resistance connected in parallel after increases by 10% and 20% (R_p) = 13.6Ω</p> <p>New Power dissipated = 11/2 W</p> <p>Change in power dissipation = 1.5W</p> <p>Change in percentage of power dissipation = 12.5 %</p>			<p>1/2 marks</p> <p>1/2 marks</p> <p>1 mark</p> <p>(Award 1/2 marks for each $r_1 = 22\Omega$, $r_2 = 36\Omega$)</p> <p>1/2 marks</p> <p>1/2 marks</p> <p>1/2 marks</p> <p>1/2 marks</p>

Item: 32

<i>Class</i>	10	<i>Subject</i>	Physics
<i>Cognitive Level</i>	Understand	<i>Content Domain</i>	Electricity
<i>Competency</i>	C-2.4 Manipulates and analyze different characteristics of circuit (current, voltage, resistance) and mathematise their relationship (Ohm's law) and applies it to everyday usage (electricity bill, short circuit, safety measures)		
<i>Learning Outcomes</i>	Explains the effect of connection of resistances in current and voltage of an electric circuit		
<i>Marks</i>	2		
<i>Item Stem</i>	Suppose two different resistances R1 and R2 ($R1 > R2$) in a circuit are connected in parallel to each other, what conclusion can be made on the potential difference and current across individual resistor of the circuit?		
<i>Marking Scheme</i>			
<i>Expected Response</i>			<i>Marks</i>
When the resistance are connected in parallel, the potential difference(V) across each resistor will remain the same irrespective of the value of individual resistor.			1 mark
In a parallel circuit, each resistor has the same voltage across it, which is equal to the voltage of the source.			(Award 1 mark for any of these responses)
the current in each resistor depends on its resistance:			½ mark
• A lower resistance allows more current to flow.			½ mark
• A higher resistance allows less current to flow.			(Award only ½ mark if it is just the point the current in each resistor depends on its resistance)
			.

Chemistry

Item: 33

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Chemical reactions and equations
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
Learning Outcome	Understands the process of rancidity		
Item stem	<p>Antioxidants are added to food items containing fat or oil so that their smell and taste doesn't change. Similarly, the chips manufacturers flush the chips packets with a gas to maintain their flavour. Identify which gas from below would be the most appropriate for the mentioned purpose in terms of cost, availability and properties.</p> <p>(i) Hydrogen (ii) Oxygen (iii) Nitrogen (iv) Argon</p>		
Key	(iii)		
Distractor 1	(i)		
Distractor 2	(ii)		
Distractor 3	(iv)		

Item: 34

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Metal & Non-metal
Competency	C-1.1 Describes classification of elements in the Periodic table and explains how compounds (including carbon compounds) are formed based on atomic structure (Bohr's model) and properties (valency)		
Learning Outcome	Differentiates between metals and non metals		
Item stem	An element 'X' has an electronic configuration of 2,8,7. What is 'X'?		
Key	Non-metal		
Distractor 1	Metal		
Distractor 2	Metalloid		
Distractor 3	Alloy		

Item: 35

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Metal & Non-metal
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
Learning Outcome	Explains the properties of compounds based on their atomic bonding		
Item stem	<p>Consider the following Assertion (A) and Reason (R) statements:</p> <p>Assertion (A): In solid state, sodium chloride (NaCl) is a poor conductor of electricity. Reason (R): In ionic compounds, ions cannot move freely from point to point in a solid state.</p> <p>Choose the correct option from the alternatives provided</p>		
Key	Both (A) and (R) are true and (R) is the correct explanation of (A)		
Distractor 1	(A) is true but (R) is false		
Distractor 2	(A) is false but (R) is true		
Distractor 3	Both (A) and (R) are true but (R) is not a correct explanation of (A)		

Item: 36

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Metal & Non-metal
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
Learning Outcome	Applies the concept of reactivity series in the given context		
Item stem	<p>Consider the following statements A and B about reactivity of aluminium</p> <p>Statement A: Food containing iron salts should not be cooked in aluminium utensils as aluminium is more reactive than iron.</p> <p>Statement B: Aluminium vessels can be used to store sodium salt solutions since aluminium is more reactive than sodium</p> <p>Which among the following options are true w.r.t the given statements?</p>		
Key	A is true, B is false		
Distractor 1	A is false, B is true		
Distractor 2	Both A and B are false		
Distractor 3	Both A and B are true		

Item: 37

Class	10	Subject	Chemistry
Cognitive level	Remember	Content Domain	Metal & Non-metal
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
Learning Outcome	Explains various methods to prevent rusting.		
Item stem	<p>Rina noticed that an iron railing near his house had developed a reddish-brown layer over time. He wanted to prevent further damage and explored various methods to protect iron objects.</p> <p>Which of the following methods should he use to effectively prevent rusting of the railing?</p> <p>(i) Galvanization (ii) Roasting (iii) Enamelling (iv) Calcination</p>		
Key	Both (i) and (iii)		
Distractor 1	Both (ii) and (iv)		
Distractor 2	Only (iv)		
Distractor 3	Both (i) and (ii)		

Item: 38

Class	10	Subject:	Chemistry
Cognitive level	Remember	Content domain	Acids bases & Salts
Competency	C-1.2 Investigates the nature and properties of chemical substances (distillation, crystallisation, chromatography, centrifugation, types and properties of mixtures, solutions, colloids, and suspensions)		
Learning outcome	Describes the action of different types of solutions on indicator.		
Item stem:	A student adds a few drops of phenolphthalein to a soap solution. The colour of the solution turns pink. What is the reason for this?		
Key:	Soap solution is basic in nature.		
Distractor 1	Soap solution is acidic in nature.		
Distractor 2	Soap solution is neutral in nature		
Distractor 3	Colour of phenolphthalein is pink.		

Item: 39

Class	10	Subject	Chemistry
Cognitive level	Understand	Content domain	Acids bases & Salts
Competency:	C-1.2 Investigates the nature and properties of chemical substances (distillation, crystallisation, chromatography, centrifugation, types and properties of mixtures, solutions, colloids, and suspensions)		
Learning outcome:	Explains the chemical properties of chemical compounds		
Item stem:	<p>Consider the below Assertion (A) and Reason (R) statements:</p> <p>Assertion (A): Baking soda has alkaline properties when dissolved in water.</p> <p>Reason (R): Baking soda reacts with hydrochloric acid in the stomach, neutralizing acidity and increasing the pH</p> <p>Select the correct option from the given alternatives</p>		
Key:	Both (A) and (R) are true, and (R) is the correct explanation of (A)		
Distractor 1	(A) is true but (R) is false		
Distractor 2	Both (A) and (R) are true, and (R) is not the correct explanation of (A)		
Distractor 3	(A) is false but (R) is true		

Item: 40

Class	10	Subject	Chemistry
Cognitive level	Understand	Content domain	Acids bases & salts
Competency:		C-1.2 Investigates the nature and properties of chemical substances (distillation, crystallisation, chromatography, centrifugation, types and properties of mixtures, solutions, colloids, and suspensions)	
Learning outcome:		Identifies whether a solution is acidic or basic using litmus paper.	
Item stem:		<p>Consider the statement (A) and statement (B) about acids and bases and choose the correct answer.</p> <p>(A) Vinegar turns blue litmus red.</p> <p>(B) Toothpaste turns red litmus blue.</p>	
Key:		(A) and (B) are true	
Distractor 1:		(A) and (B) are false	
Distractor 2:		(A) is true, (B) is false	
Distractor 3:		(A) is false, (B) is true	

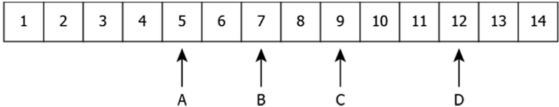
Item: 41

Class	10	Subject	Chemistry
Cognitive level	Understand	Content domain	Acid, Bases & Salts
Competency:		C-1.2 Investigates the nature and properties of chemical substances (distillation, crystallisation, chromatography, centrifugation, types and properties of mixtures, solutions, colloids, and suspensions)	
Learning outcome:		Explains the pH scale	
Item stem:		<p>You are provided with an aqueous solution of an acid and a base. Based upon its pH, which of the following statements is correct?</p> <p>(i) Higher the pH, stronger the acid</p> <p>(ii) Higher the pH, weaker the acid</p> <p>(iii) Lower the pH, stronger the base</p> <p>(iv) Lower the pH, weaker the base</p>	
Key:		(ii) and (iv)	
Distractor 1		(i) and (iii)	
Distractor 2		(ii) and (iii)	
Distractor 3		(i) and (iv)	

Item: 42

<i>Class</i>	10	<i>Subject</i>	Chemistry
<i>Cognitive level</i>	Remember	<i>Content domain</i>	Acids bases & Salts
<i>Comp5tency</i>		C-1.2 Investigates the nature and properties of chemical substances (distillation, crystallisation, chromatography, centrifugation, types and properties of mixtures, solutions, colloids, and suspensions)	
<i>Learning outcome</i>		Describes the nature and properties of chemical substances	
<i>Item stem</i>		Match the following chemical compounds given in Column I with their appropriate application given in Column II: Column I Column II (a) Bleaching Powder (i) Preparation of glasses (b) Baking soda (ii) Food preservative (c) Washing soda (iii) Disinfectant (d) Sodium chloride (iv) Antacid	
<i>Key</i>		(a) and (iii), (b) and (iv), (c) and (i), (d) and (ii)	
<i>Distractor 1</i>		(a) and (ii), (b) and (i), (c) and (iv), (d) and (iii)	
<i>Distractor 2</i>		(a) and (iii), (b) and (iv), (c) and (ii), (d) and (i)	
<i>Distractor 3</i>		(a) and (iv), (b) and (ii), (c) and (i), (d) and (iii)	

Item: 43

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Acids, Bases and salts
Competency	C1.2 Investigates the nature and properties of chemical substances (distillation, crystallisation, chromatography, centrifugation, types and properties of mixtures, solutions, colloids, and suspensions)		
Learning Outcome	Classifies materials based on their pH values.		
Item stem	<p>The image shows the pH values of four solutions, A,B,C and D on a pH scale.</p>  <p>Which of the following statement is false with reference to the given image?</p>		
Key	Mixture of same amount of B & C will be neutral		
Distractor 1	A is acidic and D is basic.		
Distractor 2	D is the strongest base among the four solutions		
Distractor 3	C is alkaline in nature		

Item: 44

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Carbon and its compounds
Competency	C-1.1 Describes classification of elements in the Periodic Table, and explains how compounds (including carbon compounds) are formed based on atomic structure (Bohr's model) and properties (valency)		
Learning Outcome	Explains covalent bond formation in carbon compounds		
Item stem	<p>Consider the below Assertion (A) and Reason (R) statements:</p> <p>Assertion (A): Carbon atoms form covalent bonds by sharing electrons with other atoms. Reason (R): All carbon electrons are available for bonding.</p> <p>Select the correct option from given alternatives</p>		
Key	(A) is true but (R) is false		
Distractor 1	Both (A) and (R) are true, but (R) is not the correct explanation of (A)		
Distractor 2	Both (A) and (R) are true, and (R) is the correct explanation of (A)		
Distractor 3	(A) is false but (R) is true		

Item: 45

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Carbon and its compounds
Competency	C-1.1 Describes classification of elements in the Periodic Table, and explains how compounds (including carbon compounds) are formed based on atomic structure (Bohr's model) and properties (valency)		
Learning Outcome	Differentiates between structure of various organic compounds		
Item stem	<p>The given image represents the structure of a carbon compound.</p> <div style="text-align: center;"> $\begin{array}{c} \text{H} \quad \text{H} \\ \quad \\ \text{H}-\text{C}-\text{C}-\text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$ </div> <p>Which of the following options appropriately describes the above structure?</p>		
Key	Alkane, Ethane, C_2H_6		
Distractor 1	Alkyne, Ethyne, C_2H_2		
Distractor 2	Alkane, Methane, CH_4		
Distractor 3	Alkyne, Methyne, C_2H_2		

Item: 46

<i>Class</i>	10	<i>Subject</i>	Chemistry								
<i>Cognitive level</i>	Remember	<i>Content Domain</i>	Carbon and its compounds								
<i>Competency</i>	C-1.1 Describes classification of elements in the Periodic Table, and explains how compounds (including carbon compounds) are formed based on atomic structure (Bohr’s model) and properties (valency)										
<i>Learning Outcome</i>	Distinguishes the formulae for family of hydrocarbons.										
<i>Item stem</i>	Match the following hydrocarbons in Column A with their respective formulae in Column B: <table><tr><td><u>Column A</u></td><td><u>Column B</u></td></tr><tr><td>I. Alkanes</td><td>1. C_nH_{2n+2}</td></tr><tr><td>II. Alkenes</td><td>2. C_nH_{2n-2}</td></tr><tr><td>III. Alkynes</td><td>3. C_nH_{2n}</td></tr></table>			<u>Column A</u>	<u>Column B</u>	I. Alkanes	1. C _n H _{2n+2}	II. Alkenes	2. C _n H _{2n-2}	III. Alkynes	3. C _n H _{2n}
<u>Column A</u>	<u>Column B</u>										
I. Alkanes	1. C _n H _{2n+2}										
II. Alkenes	2. C _n H _{2n-2}										
III. Alkynes	3. C _n H _{2n}										
<i>Key</i>	I=1, II=3, III=2										
<i>Distractor 1</i>	I=1, II=2, III=3										
<i>Distractor 2</i>	I=2, II=1, III=3										
<i>Distractor 3</i>	I=3, II=2, III=1										

Item: 47

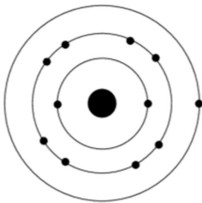
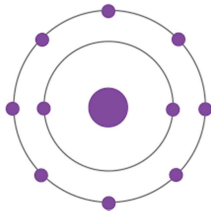
Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Carbon and its compounds
Competency	C-1.1 Describes classification of elements in the Periodic Table, and explains how compounds (including carbon compounds) are formed based on atomic structure (Bohr's model) and properties (valency)		
Learning Outcome	Explains the characteristics of allotropes of an element.		
Item stem	<p>Consider the following statements:</p> <p>I. Allotropy is the property of some element to exist in two or more different forms.</p> <p>II. Allotropes of elements have similar physical properties but distinct chemical properties</p> <p>III. Gold and diamond are allotropes of carbon.</p> <p>Which of the above statement(s) are true?</p>		
Key	Only I		
Distractor 1	Both I & II		
Distractor 2	Both I & III		
Distractor 3	Both II & III		

Item: 48

Class	10	Subject	Chemistry
Cognitive Level	Understand	Content Domain	Periodic classification of elements
Competency	C 1.1 Describes classification of elements in the Periodic Table and explains how Compounds (including carbon compounds) are formed based on atomic structures (Bohr's Model) and properties (valency).		
Learning Outcome	Identifies elements and their properties based on their atomic numbers.		
Marks	2		
Item Stem	Given are the elements A, B, C and D with atomic numbers 8, 9, 10 and 19 respectively. Identify the element which is – i. Highly electronegative in nature ii. Highly electropositive in nature iii. An inert gas in nature iv. Most reactive		
Marking Scheme			
Expected Students Response			Marks
(i) Element A with atomic number 8; Oxygen			½ mark
(ii) Element D with atomic number 19; Potassium			½ mark
(iii) Element C with atomic number 10; Neon			½ mark
(iv) Element B with atomic number 9; Fluorine			½ mark
			(Award full marks even if element names are not given)

Item: 49


Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Chemical reactions and equations
Competency	C-1.1 Describes classification of elements in the Periodic Table, and explains how compounds (including carbon compounds) are formed based on atomic structure (Bohr's model) and properties (valency)		
Learning Outcome	Relates the valency of the atom to the reactivity of an atom.		
Marks	4		

<p><i>Item stem</i></p>	<p>The atomic structure of an atom X and atom Y is represented as shown below:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>X</p> </div> <div style="text-align: center;">  <p>Y</p> </div> </div> <ol style="list-style-type: none"> 1. What is the atomic number of X? 2. How many valence electrons does Y have? 3. Which one will be more reactive? Give reason.
<p>Marking Scheme</p>	
<p><i>Expected Students Response</i></p>	<p>Marks</p>
<p>1. Atomic number of X is 11.</p>	<p>1 mark</p>
<p>2. Number of valence electrons of Y = 8</p>	<p>1 mark</p>
<p>3. Atom X will be more reactive because it only has one electron in its valency, it can lose this electron easily to form a bond with other atoms. While atom Y has completely filled valence shell and does not lose or gain electrons to form bonds with other atoms.</p>	<p>2 marks (Award ½ mark for each of the highlighted points)</p>

Item: 50

Class	10	Subject	Chemistry
Cognitive level	Apply	Content Domain	Chemical reactions and equations
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (acid and base, metal, and non-metal, reversible, and irreversible)		
Learning Outcome	Applies the concept of acids and bases in day- to-day life		
Marks	3		
Item stem	<p>A commercial acid tanker was involved in a road accident and all its contents were spilled on the road. On the side of the road, an iron electric post began fizzing as the acid ran over it.</p> <p>a. Explain why the iron post began fizzing when the acid run over it. b. How will you know if the acid is leaked to the nearby lake? c. If the acid is leaked on the nearby lake, how will you neutralise it?</p>		
Marking Scheme			
Expected Students Response			Marks
a. When metal came in contact with an acid , hydrogen gas is produced. The fizzing sound is due to the hydrogen gas that is liberated during the chemical reaction			1 mark (Similar explanation shall be accepted – Award 1/2 if explanation is unclear)
b. By dipping blue litmus paper into the water, we can know whether the acid is leaked or not. If the acid is leaked, blue litmus paper will turn into red.			1 mark (Award 1/2 mark for each of the highlighted point)
c. Acid can be neutralised by adding basic solution. Or Acid can be neutralized by adding Lime (Calcium hydroxide) / sodium hydroxide or sodium Carbonate			Award ½ mark if just base is given Award 1 mark if the base is named as any of the given bases or anything valid.

Item: 51

Class	10	Subject	Chemistry
Cognitive level	Apply	Content Domain	Chemical reactions and equations
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (acid and base, metal, and non-metal, reversible, and irreversible)		
Learning Outcome	Explains the electrical conductivity of various solutions.		
Marks	3		
Item stem	<div></div> <p>Image source: https://images.app.goo.gl/kZTUCEsVL2mao3un6</p> <p>The above image is of an electric steam vaporiser that we commonly used during Covid 19 pandemic. The vaporizer has electrodes that passes electric current through the water which results in heating of water.</p> <p>To produce maximum vapour/steam which of the two liquids will you fill in the vaporizer: a) Distilled water b) Salt water? Give reason to support your answer.</p>		
Marking Scheme			
Expected Students Response			Marks
<ul style="list-style-type: none">- To produce maximum vapour/steam will fill the vaporizer with salt water.- Distilled water is a poor conductor of electricity, so it heats up slowly and produces less steam. Saltwater is a good conductor of electricity, leading to faster heating and more steam production.			1 mark
			2 marks (Award ½ mark for each of the highlighted points) ½+ ½ + ½ + ½ = 2 marks

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Chemical reactions and equations
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (acid and base, metal, and non-metal, reversible, and irreversible)		
Learning Outcome	Explains chemical properties of acids and bases in the given scenario		
Marks	2		
Item stem	Two boys ‘A’ and ‘B’ prepare dilute sulphuric acid (H_2SO_4). ‘A’ added concentrated H_2SO_4 to water slowly with constant stirring and cooling. While ‘B’ added water to concentrated H_2SO_4 .		
	Who did the process correctly? What are the consequences of doing the incorrect procedure?		
Marking Scheme			
Expected Students Response			Marks
- ‘A’ did it correctly. ‘B’ did it incorrectly. If water is added to a conc. acid a large amount of heat will be produced. Or - Adding water to conc. acid is an exothermic reaction - This high heat may cause injuries			1 Mark
Or -This high heat may cause explosion ‘			½ mark + ½ mark

Item: 53

Class	10	Subject	Chemistry
Cognitive Level	Understand	Content Domain	Chemical Reactions and Equations
Competency	C 1.3 Describes and represents chemical interaction changes using symbols and chemical equations (Acids and base, non-metal, reversible and irreversible)		
Learning Outcome	Differentiates between Oxidation and Reduction reactions		
Marks	3		
Item Stem	Identify the reducing agent in the following reactions: (i) $4\text{NH}_3 + 5\text{O}_2 \rightarrow 4\text{NO} + 6\text{H}_2\text{O}$ (ii) $\text{Fe}_2\text{O}_3 + 3\text{CO} \rightarrow 2\text{Fe} + 3\text{CO}_2$ (iii) $\text{ZnO} + \text{C} \rightarrow \text{Zn} + \text{CO}$ (iv) $\text{SO}_2 + 2\text{H}_2\text{S} \rightarrow 2\text{H}_2\text{O} + 3\text{S}$ (v) $\text{CuO} + \text{H}_2 \rightarrow \text{Cu} + \text{H}_2\text{O}$ (vi) $\text{MnO}_2 + 4\text{HCl} \rightarrow \text{MnCl}_2 + 2\text{H}_2\text{O}$		
Marking Scheme			
Expected Students Response			Marks
(i) NH_3			½ mark
(ii) CO			½ mark
(iii) C			½ mark
(iv) H_2S			½ mark
(v) H_2			½ mark
(vi) HCl			½ mark

Item: 54

Class	10	Subject	Chemistry
Cognitive level	Analyze	Content Domain	Chemical reactions and equations
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (acid and base, metal, and non-metal, reversible, and irreversible)		
Learning Outcome	Explain the law of conservation of mass and its relevance in balancing chemical equation.		
Marks	4		
Item stem	a. Taking the example of cellular respiration in animals, explain the law of conservation of mass and its relevance in balancing chemical equations. b. Can we consider photosynthesis and respiration as a single reversible reaction.? Give reason.		
Marking Scheme			

<i>Expected Students Response</i>	<i>Marks</i>
<p>a. During Cellular respiration:</p> <p>-The reactants: glucose (C₆H₁₂O₆) and oxygen (O₂)</p> <p>-The products: carbon dioxide (CO₂) and water (H₂O)</p> <p>-The chemical equation:</p> $\text{C}_6\text{H}_{12}\text{O}_6 + 6 \text{O}_2 \rightarrow 6 \text{CO}_2 + 6 \text{H}_2\text{O}$ <p>-The number of atoms of reactants equals the number of atoms of products, i.e. 6 carbon atoms, 12 hydrogen atoms, 18 oxygen atoms.</p> <p>-No atoms are created or destroyed during this process, they're just rearranged into molecules of carbon dioxide and water.</p>	<p>½ mark</p> <p>½ mark</p> <p>1 mark</p> <p>½ + ½ = 1 Mark</p> <p>Similar kind of explanation shall be accepted with reactants, products and chemical reaction.</p> <p>The chemical equation shall be as furnished.</p> <p>Deduct 0.25 for each pointer if it's a bit unclear but provides a similar sense.</p> <p>Award 0 if each pointer is unclear and irrelevant</p>
<p>b. -Photosynthesis requires an input of energy (light) that is stored in a chemical compound glucose while cellular respiration breaks down glucose to release energy.</p> <p>-Different cellular components (chloroplast and Mitochondria) enzymes and pathways are used during the two reactions. So, they're two completely different reactions and not a single reversible reaction.</p>	<p>½ + ½ = 1 Mark</p> <p>Similar kind of explanation shall be accepted</p> <p>Deduct 0.25 for each pointer if it's a bit unclear but provides a similar sense.</p> <p>Award 0 if each pointer is unclear and irrelevant</p>

Item: 55

Class	10	Subject	Chemistry
Cognitive level	Apply	Content Domain	Metals and non-metals
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
Learning Outcome	Applies knowledge of electronic configurations to predict chemical properties of materials		
Marks	4		
Item stem	<p>Given are the electronic configurations of three elements: X = 2,5 Y = 2,8,7 Z = 2,8,2</p> <p>Answer the following based on the configurations:</p> <p>(a) (i) Which two elements will combine to form an ionic compound? Justify your answer based on their electronic configurations.</p> <p>(ii) Write the correct formula of the compound formed and explain the type of bonding involved.</p> <p>(b) (i) Identify the non-metal among the given elements and explain how you determined this.</p> <p>(ii) Which element undergoes oxidation in the reaction? Justify your answer with the concept of electron transfer.</p>		
Marking Scheme			
Expected Students Response		Marks	
a) (i) Y = 2,8,7 Z=2,8,2 (ii) Y- Cl, X- Mg (Magnesium Chloride), The electronic configuration favours Ionic Bonding		Award $\frac{1}{2}$ marks for each correct answer. $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ marks	
b) (i) Chlorine (cl) is non-metal as the valency is 7 (ii) Magnesium (Mg) undergoes oxidation due to loss of electrons		$\frac{1}{2} + \frac{1}{2} = 1$ mark $\frac{1}{2} + \frac{1}{2} = 1$ mark	

Item: 56

<i>Class</i>	10	<i>Subject</i>	Chemistry
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Metals and non-metals
<i>Competency</i>	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
<i>Learning Outcome</i>	Applies knowledge of the reactivity series of metals to predict chemical reactions and analyse their reversibility.		
<i>Marks</i>	3		
<i>Item stem</i>	<p>A student sets up an experiment by placing a zinc strip into a blue-coloured copper sulphate solution. After some time, the blue colour fades, and a reddish-brown substance appears on the zinc strip.</p> <p>Based on this experiment, answer the following questions:</p> <p>(a) Write a balanced chemical equation for the reaction that takes place.</p> <p>(b) Explain whether this reaction is reversible or not. Justify your answer with reasons based on the reactivity of metals.</p> <p>(c) What type of chemical reaction is occurring in this experiment?</p>		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
(a) $\text{Zn(s)} + \text{CuSO}_4\text{(aq)} \rightarrow \text{ZnSO}_4\text{(aq)} + \text{Cu(s)}$			1 mark
(b) The reaction is not reversible because zinc is more reactive than copper, so copper cannot replace zinc back in the solution.			$\frac{1}{2} + \frac{1}{2} = 1$ mark
(c) Displacement reaction			1 mark

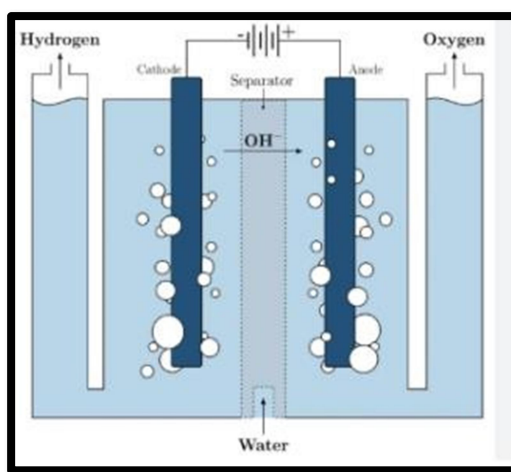
Item: 57

Class	10	Subject	Chemistry
Cognitive level	Understand	Content Domain	Metals and non-metals
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
Learning Outcome	Analyse the properties, advantages, and limitations of alloys in different applications.		
Marks	3		
Item stem	<p>A technician is given two materials—pure lead and solder alloy—to repair delicate electronic circuits.</p> <p>a. If you were the technician, which material would you choose? Justify your choice with at least two reasons.</p> <p>b. Some modern industries are replacing lead-based solder with lead-free alternatives. Evaluate the possible advantages and disadvantages of this change.</p> <p>c. Do you think alloys are always better than pure metals? Support your answer with examples.</p>		
Marking Scheme			
Expected Students Response			Marks
<p>a. Solder alloy is the best choice because it has a lower melting point and provides a stronger, more reliable joint.</p> <p>Using pure lead may cause damage to delicate components due to its higher melting point and weak bonding strength.</p>			<p>$\frac{1}{2} + \frac{1}{2} = 1$ M</p>
<p>b. Advantages of lead-free solder: Environmentally friendly, safer for health. Disadvantages: Higher melting point, may require advanced equipment.</p>			<p>$\frac{1}{2} + \frac{1}{2} = 1$ M</p> <p>(Award $\frac{1}{2}$ mark for any 1 advantage/ disadvantage. Similar answers can be accepted)</p>
<p>c. Alloys are not always better than pure metals; for example, gold (pure) is preferred in jewellery for its luster and corrosion resistance, but steel (an alloy) is stronger than iron.</p>			<p>$\frac{1}{2} + \frac{1}{2} = 1$ M</p> <p>Similar explanation can be accepted.</p>

Class	10	Subject	Science
Cognitive level	Understand	Content Domain	Metals and non-metals
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
Learning Outcome	Analyse the process of electrolysis of fused salt to produce H ₂ gas		
Marks	4		

Item stem

To produce Hydrogen gas for commercial purpose, Mr. Mawia used the assembly shown in the diagram below



Source: <https://stargatehydrogen.com/blog/basics-of-hydrogen-electrolysis/>

- (a) (i) Identify the name of the method used for hydrogen gas production.
- (ii) Which component undergoes reduction in this process?
- (b) Write the chemical reactions taking place at both the cathode and anode during this process.
- (c) Hydrogen gas is considered a future energy source. Evaluate its role in sustainable energy and suggest one challenge that needs to be overcome for its large-scale use. (2)

Marking Scheme

Expected Students Response	Marks
a) (i) Electrolysis (ii) H ⁺ ions get reduced to Hydrogen gas.	$\frac{1}{2} + \frac{1}{2} = 1 \text{ mark}$
b) At Cathode: $2\text{H}^+ + 2\text{e}^- \rightarrow \text{H}_2$	1 mark for reaction at Cathode

At Anode: $\text{H}_2\text{O} \rightarrow \text{O}_2 + 4\text{H}^+ + 4\text{e}^-$	1 mark for reaction at anode
c) Role: Clean fuel, produces only water when burned. Challenge: Hydrogen storage and transportation are expensive.	½ mark for any role ½ mark for any challenge Similar points can be considered for marks

Item : 59

<i>Class</i>	10	<i>Subject</i>	Chemistry
<i>Cognitive level</i>	Analyse	<i>Content Domain</i>	Metals and non-metals
<i>Competency</i>	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (metal and non-metal, acid and base, reversible and irreversible)		
<i>Learning Outcome</i>	Applies knowledge of the reactivity series of metals to predict chemical reactions and analyse their reversibility.		
<i>Marks</i>	5		
<i>Item stem</i>	<p>Avi conducted an experiment where he dipped a clean zinc strip into a blue copper sulphate solution. After a few hours, he noticed that the blue colour of the solution faded, and a reddish-brown layer formed on the zinc strip.</p> <p>Based on the above experiment, answer the following:</p> <p>(a) Predict what would happen if Avi used an iron strip instead of zinc. Would a similar reaction occur? Justify your answer (2)</p> <p>(b) If Avi wanted to retrieve copper ions in solution, propose a method or explain why it may or may not be feasible.</p> <p>(c) Classify the type of reaction and explain how both oxidation and reduction are involved in the same process.</p>		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>		<i>Marks</i>	
(a) Yes, a similar reaction would occur.		½ mark	
• Iron is more reactive than copper in the reactivity series.		½ mark	
• Therefore, iron can displace copper from copper sulphate solution:		½ mark	
(b) The reaction is not easily reversible because zinc is more reactive than copper, so copper cannot replace zinc back in the solution.		½ + ½ = 1 mark	
(c) Displacement reaction (redox reaction – award ¼ mark)		½ mark	

<input type="checkbox"/> Zinc is oxidized	½ mark
<input type="checkbox"/> Copper is reduced	½ mark

Item: 60

<i>Class</i>	10	Subject	Chemistry
<i>Cognitive level</i>	Understand	Content Domain	Metals and non - metals
<i>Competency</i>	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (acid and base, metal, and non-metal, reversible, and irreversible)		
<i>Learning Outcome</i>	Applies the reactions undergone by metals in the given scenario.		
<i>Marks</i>	2		
<i>Item stem</i>	<p>A student was given a newly polished copper medal for his outstanding performance in school activities. But after some days he observed a colour change on the medal as it was exposed to open air.</p> <p>a. Which chemical phenomenon is responsible for this colour change? b. Write the chemical equation involved in this reaction?</p>		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
Copper reacts with O₂, CO₂ and H₂O from the air and form a green coating called basic copper carbonate			$\frac{1}{2} + \frac{1}{2} = 1\text{M}$ (Highlighted points shall be there with alternate wording)
1. $\text{Cu} + \text{O}_2 + \text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{Cu}(\text{OH})_2 \cdot \text{CuCO}_3$ Basic copper carbonate			1 mark
			(award $\frac{1}{2}$ mark for the correct reactants and $\frac{1}{2}$ mark for the

Item: 61

Class	10	Subject	Chemistry						
Cognitive Level	Understand	Content Domain	Acids, Bases and Salts						
Competency	C - 1.2 Investigates the nature and properties of chemical substances (Distillation, Crystallization, Chromatography, Centrifugation, types and properties of mixtures, Solutions, colloids and suspensions)								
Learning Outcome	Relates the nature and properties of a solution to its pH value.								
Marks	2								
Item Stem	The pH values of three solutions X, Y, and Z are given in the table below:								
	<table><tr><th>Solution</th><th>pH</th></tr><tr><td>X</td><td>3</td></tr><tr><td>Y</td><td>7</td></tr></table>			Solution	pH	X	3	Y	7
	Solution	pH							
X	3								
Y	7								
	<table><tr><td>Z</td><td>14</td></tr></table>	Z	14						
Z	14								
	(i) Identify and name which of these solutions on reaction with zinc metal produce hydrogen gas? (ii) Which of these solutions have unpleasant bitter taste? (iii) Which of these solutions on reaction with metal oxide form salt and water? (iv) Which of these solutions turn blue litmus to red?								
Marking Scheme									
Expected Students Response			Marks						
(i) Solutions X (dilute Hydrochloric acid/ dil. HCl OR dilute Sulphuric acid/ dilute H ₂ SO ₄) (any one example)			½ mark						
(ii) Solution Z; Sodium Hydroxide			½ mark						
(iii) Solution Y; Aluminium oxide /Al ₂ O ₃ OR zinc oxide / ZnO			½ mark						
(iv) Solution X; dilute Hydrochloric acid/ dilute HCl OR dilute Sulphuric acid/ dilute H ₂ SO ₄)			½ mark						

Item: 62

Class	10	Subject	Chemistry
Cognitive level	Analyse	Content Domain	Acid, bases and salts
Competency	C-1.3 Describes and represents chemical interactions and changes using symbols and chemical equations (acid and base, metal and non-metal, reversible, and irreversible)		
Learning Outcome	Explains chemical properties of acids and bases in the given scenario.		
Marks	5		
Item stem	Common salt or sodium chloride is used to produce a variety of chemical compounds. a. Explain what happens to sodium chloride during the chlor-alkali process with the chemical reaction. b. Another product obtained from sodium chloride is baking soda. Explain the process and give the chemical equation.		

	<p>c. Is it possible to produce washing soda from baking soda? If so, explain this with a chemical equation.</p> <p>d. Baking soda and baking powder is one and the same. Yes, or no? Give reason for your response.</p>
Marking Scheme	
Expected Students Response	Marks
<p>a. During the chlor-alkali process, due to electrolysis of aqueous solution of sodium chloride, sodium hydroxide, chlorine and hydrogen are obtained.</p> $2\text{NaCl(aq)} + 2\text{H}_2\text{O} \rightarrow 2\text{NaOH} + \text{Cl}_2(\text{g}) + \text{H}_2(\text{g})$	$\frac{1}{2} + \frac{1}{2} = 1$ mark
<p>b. Aqueous solution of sodium chloride is treated with ammonia and carbon dioxide to obtain baking soda (sodium hydrogencarbonate)</p> $\text{NaCl} + \text{H}_2\text{O} + \text{CO}_2 + \text{NH}_3 \longrightarrow \text{NH}_4\text{Cl} + \text{NaHCO}_3$ <p>(Ammonium Chloride) (sodium hydrogencarbonate)</p>	$\frac{1}{2} + \frac{1}{2} = 1$ mark
<p>c. Yes, first baking soda is heated which produces sodium carbonate.</p> $\text{NaHCO}_3 \rightarrow \text{Na}_2\text{CO}_3 + \text{CO}_2 \uparrow + \text{H}_2\text{O} \uparrow$ <p>Recrystallisation of sodium carbonate gives washing soda.</p> $\text{Na}_2\text{CO}_3 + 10\text{H}_2\text{O} \rightarrow \text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$	1+1 =2 marks
<p>d. Baking powder is obtained by mixing baking soda with a mild edible acid such as tartaric acid.</p>	1 mark

Item: 63

<i>Class</i>	10	<i>Subject</i>	Chemistry
<i>Cognitive Level</i>	Understand	<i>Content Domain</i>	Acids, Bases and Salts
<i>Competency</i>	C - 1.2 Investigates the nature and properties of chemical substances (Distillation, Crystallization, Chromatography, Centrifugation, types and properties of mixtures, Solutions, colloids and suspensions)		
<i>Learning Outcome</i>	Describes effects of pH and applies knowledge of acid-base chemistry		
<i>Marks</i>	3		
<i>Item Stem</i>	Kima is a farmer. He finds that the crop production has decreased drastically in his farms. On testing the soil sample, he was told that the pH of the soil in his field is 4.5. a) What does the changed pH indicate about the soil? b) Suggest a way to Kima to neutralise the pH of the soil so that it becomes productive again. Also give reason for your suggestion. c) How does a change in the pH of soil affected the growth of the plants? Write any 2 effects.		
<i>Marking Scheme</i>			

<i>Expected Students Response</i>	<i>Marks</i>
a) The pH of 4.5 indicate that the soil has become acidic.	½ marks
b) Adding agricultural lime or calcium carbonate will neutralise the soil.	½ marks (Any other relevant/valid additives)
c) Effects of change in the pH of soil: 1. affects the availability of nutrients to plants which in turn affects their growth 2. the plants become more prone to diseases. 3. Cause the imbalance of ions in the soil. (Any 2 of these points or some other relevant points can be accepted)	1+1=2 marks

Item: 64

<i>Class</i>	10	<i>Subject</i>	Chemistry
<i>Cognitive Level</i>	Understand	<i>Content Domain</i>	Acids, Bases and Salts
<i>Competency</i>	C 1.3 Describes and represents chemical interaction changes using symbols and chemical equations (Acids and base, non-metal, reversible and irreversible).		
<i>Learning Outcome</i>	Describes chemical reactions with equations		
<i>Marks</i>	3		
<i>Item Stem</i>	Identify the type of chemical reactions and write the related chemical equations for each of the given situations (a) Barium chloride solution is mixed with a copper sulphate solution, and a white precipitate is observed. (b) On passing Hydrogen sulphide gas through the blue solution of copper sulphate, a black precipitates of copper sulphide is formed.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
(a)			½ mark
-Precipitation reaction			1 mark
-BaCl ₂ + CuSO ₄ → BaSO ₄ + NaCl			
			½ mark
-Double Displacement Reaction			1 mark
- CuSO ₄ + H ₂ S → CuS + H ₂ SO ₄			(if the reaction is not correctly balanced but the reactant and products are correctly mentioned as chemical formulae, ½ mark can be allocated for each reaction)

Biology

Item: 65

<i>Class</i>	10	<i>Subject</i>	Biology
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Life Processes
<i>Competency</i>	C-3.1 Explains the role of cellular components (nucleus, mitochondria, endoplasmic reticulum, vacuoles, chloroplast, cell wall), including the semi – permeability of cell membrane in making cell the structural basis of living organisms and functional basis of life processes.		
<i>Learning Outcome</i>	Differentiates the process of photosynthesis and respiration		
<i>Item stem</i>	<p>Consider the statements (A) and (B) about the exchange of gases in plants and animals.</p> <p>(A) Plants and animals release carbon dioxide during respiration.</p> <p>(B) Respiration happens in plants at night as photosynthesis ceases.</p> <p>Choose the correct answer from the given options.</p>		
<i>Key</i>	(A) is true, (B) is false		
<i>Distractor 1</i>	Both (A) and (B) are true		
<i>Distractor 2</i>	(A) and (B) are false.		
<i>Distractor 3</i>	(A) is false, (B) is true.		

Item: 66

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life Processes
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Describe the modes of Gaseous Exchange in Plants.		
Item stem	<p>Consider the statements (A) and (B) about the exchange of gases in plants</p> <p>(A) Some non-vascular plants can carry out gaseous exchange by diffusion over their surfaces.</p> <p>(B) Large flowering plants can carry out gaseous exchange through root hairs</p> <p>Choose the correct answer from the given options.</p>		
Key	Both (A) and (B) are true		
Distractor 1	(A) is true, (B) is false		
Distractor 2	(A) is false, (B) is true		
Distractor 3	Both (A) and (B) are false		

Item: 67

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life Processes
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explain heterotrophic nutrition and types of heterotrophic nutrition.		
Item stem	<p>Consider the Assertion (A) and Reason (R) statements provided below:</p> <p>Assertion (A): Saprophytes play a vital role in maintaining soil fertility by decomposing dead organic matter</p> <p>Reason (R): Saprophytes, such as fungi and bacteria, break down dead plants and animals into simpler nutrients.</p> <p>Choose the correct option from the given alternatives</p>		
Key	Both (A) and (R) are true and (R) is the correct explanation of (A).		
Distractor 1	(A) is true but (R) is false		
Distractor 2	(A) is false but (R) is true		
Distractor 3	Both (A) and (R) are true but (R) is not the correct explanation of (A)		

Item :68

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life Processes
Competency	C-3.1 Explains the role of cellular components (nucleus, mitochondria, endoplasmic reticulum, vacuoles, chloroplast, cell wall), including the semi – permeability of cell membrane in making cell the structural basis of living organisms and functional basis of life processes.		
Learning Outcome	Explains the characteristic and composition of blood		
Item stem	<p>Consider the statements (A) and (B) about blood and choose the correct answer.</p> <p>(A) Blood is red in colour due to the presence of haemoglobin in RBCs</p> <p>(B) Blood and bones, both are made up of connective tissue of different types</p>		
Key	Both (A) and (B) are true		
Distractor 1	(A) is true, (B) is false		
Distractor 2	(A) is false, (B) is true		
Distractor 3	Both (A) and (B) are false		

Item: 69

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life Processes
Competency	C-3.1 Explains the role of cellular components (nucleus, mitochondria, endoplasmic reticulum, vacuoles, chloroplast, cell wall), including the semi – permeability of cell membrane in making cell the structural basis of living organisms and functional basis of life processes.		
Learning Outcome	Identifies and relates the correct functions to the cell organelles		
Item stem	Which of the following is NOT the function of Lysosomes?		
Key	is involved in the synthesis of proteins and lipids.		
Distractor 1	defend the cells against the invasion of bacteria or viruses.		
Distractor 2	causes controlled breakdown of old and damaged cells		
Distractor 3	breaking down of damaged cell organelles and wastes		

Item: 70

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life processes
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains the different types of life processes like transportation, nutrition in plants and animals		
Item stem	Consider the following Assertion (A) and Reason (R) statements: Assertion (A): Humans are aerobic organisms. Reason (R): Humans produce lactic acid through anaerobic respiration through muscle activity.		
Key	Both A and R are true, but R is not the correct explanation of A.		
Distractor 1	Both A and R are true, and R is the correct explanation of A.		
Distractor 2	A is true and R is false.		
Distractor 3	A is False and R is true.		

Item: 71

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life Processes
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains the different parts of digestive tract/alimentary canal in human beings.		
Item stem	Choose the correct sequence of organs of human digestive tract/alimentary canal from the following- A-Mouth, B-Rectum, C-Anus, D-Stomach, E-Small Intestine, F- Oesophagus, G-Large intestine		
Key	A -> F -> D -> E -> G -> B -> C		
Distractor 1	A -> D -> F -> E -> G -> C -> B		
Distractor 2	A -> F -> D -> E -> G -> C -> B		
Distractor 3	A ->F -> D -> E -> B -> G -> C		

Item: 72

Class	10	Subject	Biology
Cognitive level	Remember	Content Domain	Life Processes
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains the process of digestion		
Item stem	Saliva is secreted in our mouth during the process of ingestion. Which of the following processes will be affected if saliva lacks salivary amylase?		
Key	Breakdown of starch into sugar		
Distractor 1	Breakdown of proteins into amino acids		
Distractor 2	Synthesis of starch from sugar		
Distractor 3	Synthesis of proteins from amino acids		

Item: 73

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life Processes
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains the processes pertaining to cellular respiration in plants		
Item stem	During cellular respiration in plants, glucose is converted into Pyruvate with release of some energy. In which part of the cell does this process occur?		
Key	Cytoplasm		
Distractor 1	Chloroplast		
Distractor 2	Mitochondria		
Distractor 3	Ribosome		

Item : 74

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Control and Coordination
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains parts of the brain and their functions.		
Item stem	Which part of the brain controls and coordinates body movements like running, walking, jumping?		
Key	Cerebellum		
Distractor 1	Cerebrum		
Distractor 2	Medulla oblongata		
Distractor 3	Hypothalamus		

Item: 75

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Control and Coordination
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Analyse the pattern of transmission of nerve impulse in the Nervous system.		
Item stem	Choose the correct pathway for transmission of nerve impulse.		
Key	Stimulus → Receptor organ → Sensory nerve → Brain and Spinal cord → Motor nerve → Effector organ → Response		
Distractor 1	Stimulus → Effector organ → Sensory nerve → Brain and Spinal cord → Motor nerve → Receptor organ → Response		
Distractor 2	Stimulus → Sensory nerve → Receptor organ → Brain and Spinal cord → Effector organ → Motor nerve → Response		
Distractor 3	Stimulus → Motor nerve → Receptor organ → Brain and Spinal cord → Effector organ → Sensory nerve → Response		

Item: 76

Class	10	Subject	Biology
Cognitive level	Remember	Content Domain	Control and Coordination
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains the disorders/diseases and symptoms caused by deficiency or over secretion of hormones.		
Item stem	Iodised salt is used to control _____		
Key	Hypothyroidism		
Distractor 1	Hyperthyroidism		
Distractor 2	Gigantism		
Distractor 3	Dwarfism		

Item: 77

<i>Class</i>	10	<i>Subject</i>	Biology				
<i>Cognitive level</i>	Remember	<i>Content Domain</i>	How do organisms reproduce?				
<i>Competency</i>	C 3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants: absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants: circulation in animals), exchange of materials (respiration and excretion), and reproduction.						
<i>Learning Outcome</i>	Differentiates between modes of asexual reproduction.						
<i>Item stem</i>	Match the modes of reproduction in Column I with the involved organisms in Column II?						
	<table><tr><td>Column I</td><td>Column II</td></tr><tr><td>i) Budding ii) Multiple fission iii) Spore formation iv) Fragmentation</td><td>a) Spirogyra b) Rhizopus c) Plasmodium d) Yeast</td></tr></table>			Column I	Column II	i) Budding ii) Multiple fission iii) Spore formation iv) Fragmentation	a) Spirogyra b) Rhizopus c) Plasmodium d) Yeast
	Column I	Column II					
i) Budding ii) Multiple fission iii) Spore formation iv) Fragmentation	a) Spirogyra b) Rhizopus c) Plasmodium d) Yeast						
Which of the following options represent the correct matching?							
<i>Key</i>	i-d, ii-c, iii-b, iv-a						
<i>Distractor 1</i>	i-a, ii-b, iii-c, iv-d						
<i>Distractor 2</i>	i-c, ii-a, iii-b, iv-d						
<i>Distractor 3</i>	i-c, ii-a, iii-d, iv-b						

Item: 78

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	How do organisms reproduce?
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants: absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants: circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Describes contraceptive surgical processes in human		
Item stem	<p>Consider the statements (A) and (B) about contraceptive surgical processes and choose the correct answer.</p> <p>(A): In vasectomy removal of the testes is performed leading to absence of sperm production.</p> <p>(B): In tubectomy the fallopian tube is blocked, so that the egg will not be able to reach the uterus.</p>		
Key	(A) is false, (B) is true.		
Distractor 1	A) is true, (B) is false.		
Distractor 2	Both (A) and (B) are true.		
Distractor 3	Both (A) and (B) are false.		

Item: 79

Class	10	Subject	General Science
Cognitive level	Understand	Content Domain	How do organisms reproduce?
Competency	C- 3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants: absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants: circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Differentiate between methods of vegetative propagation		
Item stem	Sangi is an avid gardener and has a big kitchen garden behind her house. She likes to maintain her plantations actively and uses layering method to increase her _____production.		
Key	Strawberry		
Distractor 1	Banana		
Distractor 2	Coconut		
Distractor 3	Cactus		

Item: 80

Class	10	Subject	Science
Cognitive level	Apply	Content Domain	Heredity and Evolution
Competency	C-4.4 Analyses patterns of inheritance of traits in terms of Mendel's laws and its consequences at a population level (using models and/or simulations)		
Learning Outcome	Predicts proportion/percentage of features in offspring from the furnished genetic data on parents.		
Item stem	<p>A village garden has two types of pea plants: those with yellow flowers and those with white flowers. The yellow flower trait (Y) is dominant, while the white flower trait (y) is recessive. Jonathan decides to conduct an experiment. He crosses a pea plant with yellow flowers (Yy) with another pea plant that also has yellow flowers (YY).</p> <p>What would be the likelihood of Jonathan getting offspring with white flowers?</p>		
Key	0%		
Distractor 1	25%		
Distractor 2	50%		
Distractor 3	100%		

Item: 81

Class	10	Subject	Science
Cognitive level	Remember	Content Domain	Heredity and Evolution)
Competency	C-3.3 Describes mechanisms of heredity (in terms of DNA, genes, chromosomes) and variation (as changes in the sequence of DNA)		
Learning Outcome	Explains the role of chromosomes in sex determination and genetic diseases in humans		
Item stem	<p>Lalrindiki is a genetic counsellor at a hospital. She explains a family about the role of chromosomes involved in determining the sex of their future children and carrying genes related to certain genetic diseases. Which of the following Lalrindiki is referring to?</p>		
Key	Allosomes		
Distractor 1	Autosomes		
Distractor 2	Centromeres		
Distractor 3	Telomeres		

Item: 82

Class	10	Subject	Science
Cognitive level	Understand	Content Domain	Heredity and Evolution
Competency	C 4.5 Analyses evidence of biological evolution demonstrating the consequences of the process of natural selection in terms of changes- in allele frequency in population, structure and function of organisms.		
Learning Outcome	Differentiate between the homologous and analogous organs		
Item stem	<p>Consider statements (A) and (B) about evolutionary origins and choose the correct option</p> <p>(A) Homologous organs have dissimilar anatomy and have similar functions, but their origins are different.</p> <p>(B) Analogous organs have similar anatomy and have dissimilar functions, but their origins are common.</p>		
Key	(A) and (B) are false.		
Distractor 1	(A) is true, (B) is false.		
Distractor 2	Both (A) and (B) are true		
Distractor 3	(A) is false, (B) is true.		

Item: 83

Class	10	Subject	Science
Cognitive level	Understand	Content Domain	Heredity and Evolution
Competency	C-3.3 Describes mechanisms of heredity (in terms of DNA, genes, chromosomes) and variation (as changes in the sequence of DNA)		
Learning Outcome	Explains sex determination in human beings		
Item stem	<p>Consider the following statements regarding sex-determination in humans -</p> <p>(i) Sex of the offspring is determined by the presence or absence of the Y chromosome</p> <p>(ii) Females have a mismatched pair of different sized sex chromosomes both called X</p> <p>(iii) Males have a perfect pair of normal-sized X and Y chromosomes</p> <p>(iv) Offspring will inherit an Y chromosome from their mother regardless of their sex</p> <p>Which of them is/are correct?</p>		
Key	Only (i)		
Distractor 1	(ii) & (iii)		
Distractor 2	(i) & (iv)		
Distractor 3	(i), (ii) & (iv)		

Item: 84

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Management of Natural resources
Competency	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
Learning Outcome	Explains importance of resource conservation and ways to achieve same (fossil fuels, water, forest and wildlife, minerals etc.).		
Item stem	As area was rich in forest cover but due to a forest fire the entire forest got burned down. This area can be replenished with trees by carrying out		
Key	Reforestation		
Distractor 1	Afforestation		
Distractor 2	Deforestation		
Distractor 3	Desertification		

Item: 85

Class	10	Subject	Biology
Cognitive level	Remember	Content Domain	Management of Natural resources
Competency	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
Learning Outcome	Explains the process of rainwater harvesting and its significance		
Item stem	The ultimate objective of rainwater harvesting is to		
Key	Increase ground water level		
Distractor 1	Prevent soil erosion by rainwater		
Distractor 2	Prevent flowing away of rainwater		
Distractor 3	Meet the rising water demands in cities		

Item: 86

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Management of Natural resources
Competency	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
Learning Outcome	Applies knowledge and understanding about energy conservation through real life situations.		
Item stem	Which of these is NOT an energy conservation measure?		
Key	Using Incandescent Bulbs at home.		
Distractor 1	Using solar panels for electricity		
Distractor 2	Car- pooling to travel to workplaces		
Distractor 3	Switching off lights and fans when not in use.		

Item: 87

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Management of Natural resources
Competency	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
Learning Outcome	Analyses the factors associated with sustainable development.		
Item stem	<p>Which of the statement (s) from below is/are correct about the sustainable development?</p> <p>(i) Economic development is linked with environmental conservation.</p> <p>(ii) Sustainable development encourages development for current generations and conservation of resources for future generations.</p> <p>(iii) Sustainable development interferes with the balance between needs of the society, economy and the environment.</p> <p>(iv) Sustainable development is a long planned and persistent development.</p>		
Key	(i), (ii) & (iv)		
Distractor 1	(i) & (ii)		
Distractor 2	(ii), (iii) & (iv)		
Distractor 3	Only (iii)		

Item: 88

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Management of Natural resources
Competency	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
Learning Outcome	Corelates effect of developmental projects with ecological degradation.		
Item stem	<p>Consider the below Assertion (A) and Reason (R) statements: Assertion (A): Low Rainfall and droughts have become common in deforested areas. Reason (R): Rapid urbanization and development requires cutting down of trees on a large scale. Choose the correct option from the given alternatives.</p>		
Key	Both (A) and (R) are true, and (R) is the correct explanation of (A).		
Distractor 1	(A) is true, but (R) is false.		
Distractor 2	(A) is false, but (R) is true.		
Distractor 3	Both (A) and (R) are true, but (R) is not a correct explanation of (A).		

Item 89

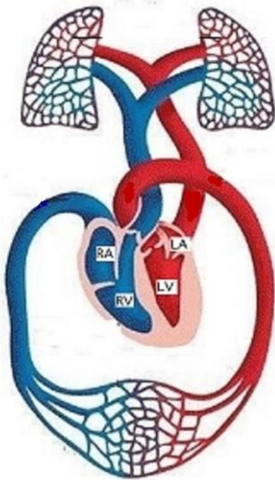
Class	10	Subject	Biology
Content domain	Life Processes		
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Compares the respiration process in different organisms.		
Marks	3		
Cognitive level	Understand		
Item stem	The mechanism of breathing as well as the breathing rate is different in different organisms. a) Taking the example of fish and humans, explain how their breathing rate related to their habitats. b) Compare the process of respiration in fish and human in reference to the structure of their respiratory systems.		
Marking Scheme			
Expected Response		Marks	Further information
a. Breathing rate is faster in fishes as compared to humans because the amount of oxygen dissolved in water is less as compared to that in the air.		1 Mark	

b. Structure of the respiratory systems:			$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ Mark	At least 2 comparative points should be mentioned with reference to the respiratory systems of each, i.e. fish and human. In case if only partial response is given only $\frac{1}{2}$ mark will be given per point.
Sr no	Fish	Human		
1	Take in dissolved oxygen through mouth	Take in oxygen rich air through nostrils/ nose		
2	The oxygen rich water passes over the gills.	The oxygen rich air passes through the trachea into the lungs.		
3	The oxygen enters the blood from the gills by diffusion.	The oxygen enters the blood through the alveoli by diffusion.		

Item 90

Class	10	Subject	Biology
Content domain	Life Processes		
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Describe the modes of Nutrition in different living organisms.		
Marks	2		
Cognitive level	Understand		
Item stem	The process of heterotrophic nutrition depends largely upon the type of food and the way it is obtained by the organisms. Give a comparative account of nutrition in the bread mould and an Amoeba relating it to their mode of nutrition.		
Marking Scheme			
Expected Response		Marks	Further information
.	Nutrition in Bread mould	Nutrition in Amoeba	In case if only partial response is given only $\frac{1}{2}$ mark will be given per point.
1	Saprotrophic mode of nutrition.	Holozoic mode of nutrition.	
2	Extracellular digestion of organic matter and the digested food is absorbed into the body.	Intracellular digestion where whole food is engulfed and digested within the cell.	
		$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ Mark	

Item: 91

Class	10	Subject	Biology
Content domain	Life Processes		
Competency	C-3.1 Explains the role of cellular components (nucleus, mitochondria, endoplasmic reticulum, vacuoles, chloroplast, cell wall), including the semi – permeability of cell membrane in making cell the structural basis of living organisms and functional basis of life processes.		
Learning Outcome	Explains the blood circulatory system in humans.		
Marks	4		
Cognitive level	Understand		
Item stem	<p>Analyse the given diagram of human circulatory system and answer the following questions:</p> <ol style="list-style-type: none">1. Name the major blood vessels that connect directly to the various chambers of the human heart.2. Why is the blood circulation in human is called double circulation?3. What would happen if humans had single circulation rather than double circulation? Give any 4 points.		
Marking Scheme			
Expected Response	Marks	Further information	
a. Superior and inferior vena cava b. Pulmonary arteries c. Pulmonary veins Aorta	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ Mark	$\frac{1}{2}$ mark to be allocated for writing the names of each of the 4 Blood vessels correctly.	
Double circulation means that the blood flows twice into the heart before it completes one full cycle - the short pulmonary (lung) circulation and the long systemic (general body) circulation.	$\frac{1}{2}$ mark for writing that the blood enters heart twice before completing one cycle $\frac{1}{2}$ for writing pulmonary /lung circulation = 1 mark	If the student explains pulmonary and systemic circulation instead of mentioning the terms, full marks can be given.	
If human had single circulation, then: a. the flow of blood will be slower b. Blood pressure will reduce c. Oxygen supply will be low Metabolic rate would be slow due to decreased energy level.	$\frac{1}{2} + \frac{1}{2} = 1$ M	If the student writes any two points that relate to single circulation, then marks can be allocated.	

Item: 92

Class	10	Subject	Biology
Content domain	Life Processes		
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Describe the process of transportation in plants.		
Marks	4		
Cognitive level	Understand		
Item stem	Sanga was sitting outside his house, watching people transport different materials by different means, like cycle, trucks, auto, etc. He wondered if plants also transported some material and did, they have any mode of transporting them. Let us help Sanga in finding answer to his queries. a. What materials do plant transport within their body? b. What are the various modes of transporting these materials from one part of plant to another? c. How is the transport of material like sugar carried out in plant cells?		
Marking Scheme			
Expected Response		Marks	Further information
a) The different material that plants transport within their body are: i. Water ii. Minerals iii. Food/sugar/ starch/ sucrose iv. Amino acids		$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ mark	
b.) i. Water and minerals are transported by means of special tissues called xylem. ii. Food/ Starch prepared in the leaves and amino acids are transported through the phloem tissues.		$\frac{1}{2} + \frac{1}{2}$ = 1 mark	For writing the true elements correctly and explaining their role.
c.) Material like sugar is transferred to phloem using ATP molecules which increases osmotic pressure of the tissue causing inward movement of water.		1 mark	Alternate wording shall be accepted.

Item: 93

Class	10	Subject	Biology
Content domain	Life Processes		
Competency	C-3.1 Explains the role of cellular components (nucleus, mitochondria, endoplasmic reticulum, vacuoles, chloroplast, cell wall), including the semi – permeability of cell membrane in making cell the structural basis of living organisms and functional basis of life processes.		
Learning Outcome	Describes the Process of Photosynthesis in Plants		
Marks	4		
Cognitive level	Understand		
Item stem	<p>Teacher and the students had a conversation about the colour of the leaves. Teacher told the students that the colours of the leaves are always green. But one of the students had observed in his garden that some of the leaves were purple, orange and some were yellow.</p> <p>a) Which cellular components contribute to the different colours of these leaves?</p> <p>b) Name the green pigment and state its role in the process of photosynthesis?</p> <p>c) List the main 4 steps that occur during photosynthesis.</p>		
Marking Scheme			
Expected Response	Marks	Further information	
a) The main reason behind these is the presence of carotenoids in the plastids/ of leaves.	$\frac{1}{2} = \frac{1}{2} = 1$ Mark	$\frac{1}{2}$ mark for carotenoids + $\frac{1}{2}$ mark for plastids/ chromoplasts	
b) The green pigment is chlorophyll which absorbs the light energy	$\frac{1}{2} + \frac{1}{2} = 1$ Mark	$\frac{1}{2}$ mark for chlorophyll + $\frac{1}{2}$ mark for its role	
c) the three steps are: i. absorption of light energy by chlorophyll ii. conversion of light energy into chemical energy iii. Splitting of water molecules into Hydrogen and oxygen iv. Reduction of carbon dioxide to carbohydrates	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ Marks	$\frac{1}{2}$ mark for each step during photosynthesis.	

Item: 94

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life processes
Competency	C 3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains the process of blood clotting.		
Marks	2		
Item stem	Thanga met with a serious accident and has been experiencing continuous bleeding since then. What could be the possible reasons for this continued bleeding?		
Marking Scheme			
Expected Students Response		Marks	
1. Thanga’s plasma protein fibrinogen may not be enough to form long, sticky threads of fibrin necessary for clotting 2. Thanga may be suffering from some disease like dengue, AIDS which decreased the number of platelets in the blood		1+1=2 Each point carries 1 mark; for partially correct response, 0.5 mark will be given.	

Item: 95

<i>Class</i>	10	<i>Subject</i>	Biology
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Life Processes
<i>Competency</i>	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
<i>Learning Outcome</i>	Explains the process of renal dialysis or artificial kidney		
<i>Marks</i>	5		
<i>Item stem</i>	Tluangi suffered from kidney failure in October 2023, yet she has managed to survive through a medical procedure that she goes through on a regular basis. Can you explain how this procedure has helped Tluangi to survive so long. Support your answer with a labelled diagram of this procedure.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>

Tluangi is going through haemodialysis or renal dialysis.

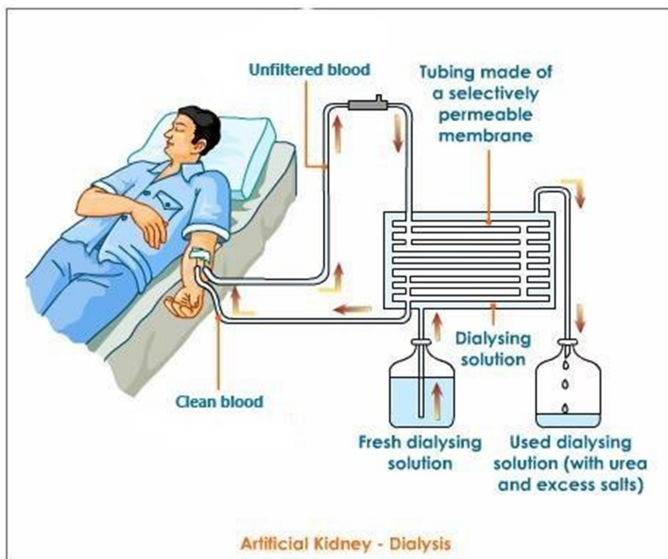
In this process the blood is passed through a machine known as artificial kidney or dialyser that removes impurities and excess fluid from the bloodstream.

The blood from an artery is pumped through a dialyser or artificial kidney where it flows through several tubes with a semipermeable lining, suspended in a tank filled with dialysing fluid.

This dialysing fluid has the same composition as that of blood plasma, but it lacks nitrogenous wastes.

When the blood of the patient is passed through the cellophane tubes, the dialysis fluid passing on the other side of the membrane removes unwanted elements in the blood by diffusion. The blood is then returned to the body through a vein.

1. Blood from the artery - $\frac{1}{2}$ mark
2. Dialyser or artificial kidney consist of tubes lined with semipermeable lining - $\frac{1}{2}$ mark
3. Tubes are suspended in a tank filled with dialysing fluid - $\frac{1}{2}$ mark
4. dialysing fluid has the same composition as that



Functioning of Artificial kidney – Dialysis

- of blood plasma, lacks nitrogenous wastes $\frac{1}{2}$ mark
5. blood is then returned to the body through a vein - $\frac{1}{2}$ mark

Diagram:

1. impure blood from artery- $\frac{1}{2}$ mark
2. Dialyser/ tubes with cellophane lining- $\frac{1}{2}$ mark
3. Dialyser – $\frac{1}{2}$ mark
4. Used dialysing solution – $\frac{1}{2}$ mark
5. Clean blood to the vein – $\frac{1}{2}$ mark

Item: 96

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life processes
Competency	C -3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains the inter-dependence of fungi and algae		
Marks	3		
Item stem	Sometimes some Fungi and algae are found growing together forming a compact structure on the bark of tree. What is this compact structure? Give reasons for this close association. What is this type of association called?		
Marking Scheme			
Expected Students Response			Marks
Algae and fungi together form a compact structure called Lichen.			½ mark
The algal partner contains chlorophyll and manufacture food by photosynthesis which is shared with the fungi while			½ + ½ = 1mark
The fungal partner absorbs water and mineral salts and share it with algae. They provide protection to algae.			½ + ½ = 1 mark
The name of the process involved is Mutualism.			½ mark

Item :97

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Life processes
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Explains the reasons of hypertension and ways to reduce it.		
Marks	4		
Item stem	Lalhruaia was soon going to appear for his board exams. His mother noticed that he was looking stressed out and showed signs of discomfort. When his blood pressure was checked it comes out to be 140/ 110 and the doctor informed his mother that his blood pressure is higher than the normal. 1. What is blood pressure? 2. If value of 140/110 is high, what is the normal value of blood pressure? 3. What do the two values i.e. 140/110 indicate? 4. Mention any 2 ways that can help Lalhruaia in bringing down the blood pressure.		
Marking Scheme			
Expected Students Response			Marks
1. Blood pressure is the pressure exerted by blood on the walls of the blood vessels.			½ mark
2. The normal blood pressure value is 120/80.			½ mark
3. 120 mm Hg is the systolic pressure and 80 mm Hg is the diastolic pressure.			½ + ½ =1 mark
Ways to reduce high blood pressure before or during examination are: - 1. He should exercise regularly 2. He should relax and manage the sleep cycles while preparing for exam. 3. He should take a balanced diet and avoid eating junk food. (any 2 of the above suggestions or similar ones can be considered)			1+1 = 2 mark

Item : 98

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Control and Coordination
Competency	C-3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants; absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants; circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Describes the disorders/diseases and symptoms caused by deficiency or over secretion of hormones.		
Marks	2		

<i>Item stem</i>	A gland secretes a particular hormone. The deficiency or over secretion of this hormone causes growth disorder or disease in the body. (a) Name the endocrine gland and hormone secreted by it. (b) Name the disorder or disease caused due to – (i) Deficiency (ii) Over secretion.	
<i>Marking Scheme</i>		
<i>Expected Students Response</i>		<i>Marks</i>
(a) Endocrine gland – Pituitary Hormone – Growth hormone (GH)		½ + ½ = 1 Mark
(b) i) Deficiency – Dwarfism ii) Over secretion – Gigantism		½ + ½ = 1 Mark

Item: 99

Class	10	Subject	Science (Biology)
Cognitive level	Understand	Content Domain	How do organisms reproduce
Competency	C- 3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants: absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants: circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Compares various contraceptive devices/ measures into categories based on their principle of action.		
Marks	4		
Item stem	<p>Liana and Mawii, after having their first child, want to take a gap before having their second child. Mawii wants to explore information around the kind of contraceptive measures she and Liana can use before consulting a doctor.</p> <p>Answer the following questions –</p> <p>a) Why is birth spacing important?</p> <p>b) Suggest one contraceptive method each for Liana and Mawii.</p> <p>c) What are the consequences of not having proper contraceptive planning?</p>		
Marking Scheme			
Expected Students Response			Marks

<p>a) Birth spacing is important because it allows individuals and couples to:</p> <ul style="list-style-type: none"> - Proper spacing between pregnancies reduces the risk of maternal and infant mortality and morbidity. - It helps in managing resources, providing better care for each child, and ensuring the health of the mother. - Smaller families can lead to better economic stability and improved quality of life. - Birth spacing enables women to pursue education and career opportunities, contributing to their empowerment and societal <i>development</i>. 	$\frac{1}{2} + \frac{1}{2} = 1$ M (Any two relevant pointers)
<p>b) Liana: condom, withdrawal method, spermicidal cream etc.</p> <p>Mawii: IUCDs, calendar method, cervical cap, oral contraceptive pills, vaginal pills etc.</p>	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ M (Any two for each of them)
<p>c) It can lead to increased incidence of teenage pregnancy, over population, unhealthy society, unemployment, poverty, unhygienic condition, pollution and decrease in natural resources etc</p>	$0.25 + 0.25 + 0.25 + 0.25 = 1$ M (Any four relevant consequences)

Item: 100

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	How do organisms reproduce
Competency	C- 3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants: absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants: circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Describes the process of pollination and fertilization.		
Marks	2		
Item stem	Two students sprinkle pollen grains from Papaya flower on the stigma of a rose plant. a. Can fertilization occur between them? Give reason for your response. b. What will happen if pollen from another rose flower of a different variety lands on the stigma of this rose flower? Why?		
Marking Scheme			
Expected Students Response			Marks
a. No; Papaya and rose are different species so fertilization will not happen			1 mark
b. - If a pollen from another variety of rose falls on the stigma of this rose flower, fertilization will occur, and a new variety of rose may get produced. fertilization occurs as both belong to same species.			$\frac{1}{2} + \frac{1}{2} = 1$ mark


Item: 101

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	How do organisms reproduce?
Competency	C- 3.2 Analyses similarities and differences in the life processes involved in nutrition (photosynthesis in plants: absorption of nutrients in fungi; digestion in animals), transport (transport of water in plants: circulation in animals), exchange of materials (respiration and excretion), and reproduction.		
Learning Outcome	Describes the changes taking place on the onset of puberty		
Marks	3		
Item stem	After reaching a certain age Thangi and Siama notice some changes in their physical appearance and the pitch of their voices has also changed. a) What could be the reason for these changes? b) What could be their possible age? c) Based upon your understanding, list 2 more distinct changes in Thangi and Siama, that normally occur during this period.		
Marking Scheme			
Expected Students Response			Marks
Both Thangi and Siama are going through the adolescence period / puberty.			½ mark
Their possible age would 10-13 for Thangi and for Siama its around 13-14 years/ The age would be ranging from 10-14 years for both.			0.25 + 0.25 = ½ mark
Any of the following two changes can be mentioned by the students:			½ + ½ +½ + ½ = 2 mark
Changes in Thangi	Changes in Siama		
Initiation of menstrual cycle	Growth of sex organs (testes and penis)		
Widening of pelvis and hips	Widening of shoulders		
Development of mammary glands	Growth of beard and Mustaches		
Growth of axillary and pubic hair	Growth of axillary and pubic hair		

Item: 102

Class	10	Subject	Biology
Cognitive level	Apply	Content domain	How do organism reproduce?
Learning Outcome	Describes pollination in reference to variation		
Marks	2		
Item stem	<p>Rama is a farmer; he grows two variety of mango plants in his garden, Mangoes form <i>Chausa</i> had sweet taste while <i>Pairi</i> produced sour tasting mangoes. After a few years he noticed that mangoes from the <i>Chausa</i> tree have started tasting sour.</p> <p>Answer the following questions:</p> <p>a) Why the mangoes from the <i>Chausa</i> tree started tasting sour?</p> <p>b) Is it possible for <i>chausa</i> tree to produce its original sweet tasting mangoes again? If so, mention the method.</p>		
Marking Scheme			
Expected Students Response			Marks
a. Chausa tree produce a sour fruit because of cross pollination with Pairi tree. During pollination, Pairi pollen fertilize Chausa tree.			$\frac{1}{2} + \frac{1}{2} = 1$
b. Yes, it is possible for Chausa tree to produce its original sweet taste. This can be done by self-pollination method.			$\frac{1}{2} + \frac{1}{2} = 1$

Item: 103

Class	10	Subject	General Science
Cognitive level	Create	Content domain	How do organism reproduce?
Learning Outcome	Explains the causes and prevention of sexually transmitted diseases.		
Marks	4		
Item stem	<p>Read the below article which appeared in ‘The Times of India’ newspaper on Dec 1, 2024.</p> <div><p>Mizoram has highest No. of HIV+ cases, says official</p><p>HC Vanlalruata / Dec 1, 2024, 22:24 IST</p><div></div><p>Aizawl: From Oct, 1990, to Aug, 2024, at least 31,461 HIV positive cases have been recorded in Mizoram, out of which 5,277 people have succumbed to it, Mizoram State AIDS Control Society officials said on Sunday.</p><p>Observing 'World AIDS Day', MSACS officials said 91.23% of HIV positive cases were between 15 and 49 years of age, with unsafe sex (63.93%) being the major factor. While 30.80% are infected through syringes and needles for drug use, 2.71% cases are related to parent-to-child transmission. 1.47% have no idea as to how they got infected, officials said.</p><p>According to the HIV Estimate and Sentinel Surveillance report released by the National AIDS Control Organisation in 2024, Mizoram has the highest number of HIV+ cases across India. Though the number of fresh cases have dropped during the 2023-24 period, the state remains the highest in HIV prevalence, officials said.</p></div> <p>Source - https://timesofindia.indiatimes.com/city/guwahati/mizoram-reports-highest-hiv-cases-in-india-warns-officials-on-unsafe-practices/articleshow/115872937.cms</p> <p>Answer the following questions:</p> <p>a) What is the causative organism of AIDS and how it affects the human body?</p> <p>b) Write a speech to be delivered in an AIDS awareness campaign for the local community. The speech shall use the data provided in the news article and underline the ways in which local community can play a role. Limit the speech to not more than 100 words.</p>		
Marking Scheme			
Expected Students Response		Marks	
Part a			
AIDS is caused by Human Immunodeficiency virus which weakens the immune system, making the body more susceptible to infections.		0.25 + 0.25 = ½ Mark	

Data provided in the newspaper article –

- ### Role of community –

-Increasing Access to Testing and Treatment: Mobile health clinics and community health workers can reach underserved populations, offering testing and linking those who test positive to appropriate medical care and support services.

(The speech shall have similar furnished pointers with admissible valid additions from the student)

1 +1 (any 2 similar or relevant measures, award 0.5 for each)

1/2 Marks

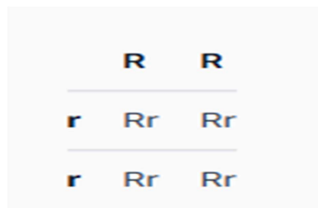
Marking Scheme	
Expected Students Response	Marks
<ul style="list-style-type: none"> - Females have XX, while males have XY pairs of sex chromosomes. When the sperm (Male) contributes a Y chromosome to the egg (female), then the progeny is a male child. - When the sperm contributes an X chromosome to the egg, the progeny is a female child. Sex of the baby is determined by the male sex chromosomes at the time of fertilization. 	<p>1 + 1 = 2 Marks</p> <p>-Similar explanation with admissible alternate wording shall be accepted in line with the furnished pointers.</p> <p>-Award 1/2 M for each furnished pointer if it's not very clear but makes sense in terms of the meaning.</p> <p>-If the response is unclear and not aligned to the pointers, no marks shall be awarded</p>

Item: 105

Class	10	Subject	Biology
Cognitive level	Apply	Content Domain	Heredity and Evolution
Competency	C-3.3 Describes mechanisms of heredity (in terms of DNA, genes, chromosomes) and variation (as changes in the sequence of DNA)		
Learning Outcome	Determine the probability of inheritance of X-linked traits.		
Marks	3		
Item stem	A set of parents are expecting a child, the father has an X-linked genetic disorder that affects his vision, and the mother is a carrier of the same disorder. If the newborn is a boy, what is the probability that he will inherit the disorder? Explain the inheritance pattern of the mutated gene in this scenario.		
Marking Scheme			
Expected Students Response			Marks
-The father has the disorder, which means he has a mutated X chromosome. The mother is a carrier, meaning she has one normal X chromosome and one mutated X chromosome. She can pass either of these X chromosomes to her son.			1+1+1 = 3 -Similar explanation with admissible alternate wording shall be accepted in line with the furnished pointers.

<p>- Since the son receives the Y chromosome from the father, he cannot inherit the X-linked disorder from the father. The son will receive one X chromosome from the mother.</p> <p>- There is a 50% probability that the mother will pass the mutated X chromosome to her son. If the son receives the mutated X chromosome from the mother, he will inherit the disorder.</p>	<p>-Award 1/2 M for each furnished pointer if it's not very clear but makes sense in terms of the meaning.</p> <p>-If the response is unclear and not aligned to the pointers, no marks shall be awarded</p>
--	--

Item :106

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Heredity and Evolution
Competency	C-4.4 Analyses patterns of inheritance of traits in terms of Mendel’s laws and its consequences at a population level (using models and/or simulations)		
Learning Outcome	Explains laws of inheritance linked to features of offspring		
Marks	4		
Item stem	A group of girls conducted an experiment in their school garden. They crossed a pea plant with round seeds (genotype RR, homozygous dominant) with a pea plant with wrinkled seeds (genotype rr, homozygous recessive). Describe the genotype and phenotype of the offsprings in the F1 and F2 generation with the help of punnet squares.		
Marking Scheme			
Expected Students Response			Marks
F1 Generation:  -All offspring will have the genotype Rr. This is because each offspring receives one R allele from the RR parent and one r allele from the rr parent. - All offspring will exhibit the round seed phenotype. The round seed trait is dominant (R), so			1+ 1/2 + 1/2 = 2 Mark 1/2 +1/2 =1 Mark, for correctly setting up the Punnett square with the correct parental genotypes. Award 1/2 mark each for description of F1 generation genotype and phenotype in text. Similar explanation with admissible alternate wording shall be accepted for the description.

it will be expressed in the presence of the recessive wrinkled seed allele (r).

F2 Generation:

	R	r
R	RR	Rr
r	Rr	rr

Genotype Ratios:

1 RR (homozygous dominant), 2 Rr (heterozygous) and 1 rr (homozygous recessive)

Phenotype Ratios:

3 round seeds (RR, Rr, Rr) and 1 wrinkled seed (rr)

In F2 generation, the genotypic ratio will be 1:2:1 (RR: Rr: rr), and the phenotypic ratio will be 3:1 (round: wrinkled).

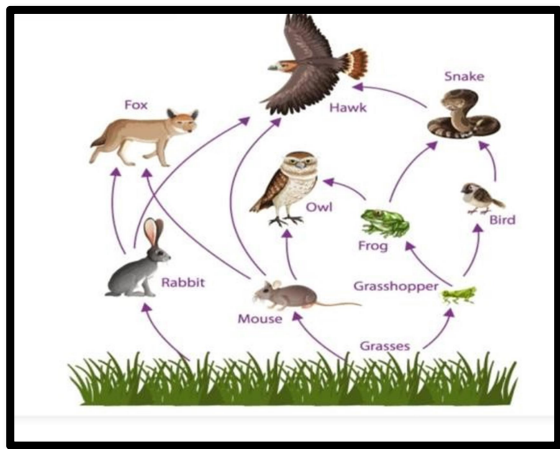
$$1 + \frac{1}{2} + \frac{1}{2} = 2M$$

$\frac{1}{2} + \frac{1}{2} = 1M$, for correctly setting up the Punnett square with the correct parental genotypes.

Award $\frac{1}{2}$ mark each for description of F1 generation genotype and phenotype in text.

Similar explanation with admissible alternate wording shall be accepted for the description. The ratio can also be shown in percentage.

Item: 107

Class	10	Subject	Biology
Cognitive level	Apply	Content Domain	Our Environment
Competency	C 4.3 Analyses different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level		
Learning Outcome	Explains the interdependence and behaviour of organisms in a food chain/web		
Marks	4		
Item stem	<p>Examine the food web given below.</p> <div></div> <p>Answer the following questions about the food web:</p> <p>a) Identify two tertiary consumers? Mention 3 ways in which they contribute to the balance of the provided food web?</p> <p>b) What will be three consequences, if the fox population goes down?</p>		
Marking Scheme			
Expected Students Response		Marks	
a. Tertiary Consumers <input type="checkbox"/> Fox, Hawk (Any other valid answer)		$\frac{1}{2} + \frac{1}{2} = 1$	
<ul style="list-style-type: none">- Help regulate the populations of secondary consumers. For example, the hawk preys on snakes and birds, keeping their numbers in check-By feeding on secondary consumers, tertiary consumers facilitate the transfer of energy up the food chain.-presence of tertiary consumers helps maintain biodiversity by ensuring that no single species dominates the ecosystem.		$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 1 \frac{1}{2}$ M	
		Similar or any relevant other explanation with	

	<p>alternate wording shall be accepted.</p> <p>-deduct 0.25 M if the consequences are not very clear but give some sense</p> <p>-Provide no marks for incorrect and irrelevant pointers.</p>
<p>b)</p> <ul style="list-style-type: none"> - overpopulation of rabbits and mice, potentially leading to overgrazing of plants. - with less foxes, rabbits may become more abundant due to reduced predation. - increased availability of rabbits could attract other predators that also feed on rabbits 	<p>$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 1 \frac{1}{2}$ M</p> <p>- Similar or any other relevant explanation with alternate wording shall be accepted.</p> <p>-Deduct 0.25 M if the pointers are not very clear but give some sense</p> <p>-Provide no marks for incorrect and irrelevant pointers.</p>

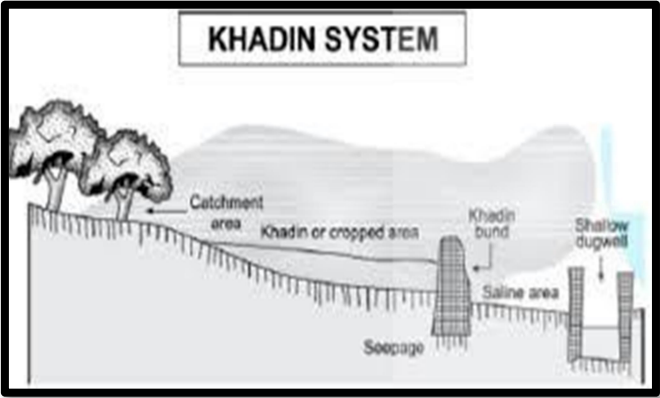
Item: 108

Class	10	Subject	Biology
Content domain	Management of Natural resources		
Competency	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
Learning Outcome	Identifies effects of developmental projects on environment realising the interdependence of biotic and abiotic factors of the environment.		
Marks	4		
Cognitive level	Analyse		
Item stem	<p>The recent railway project in Mizoram has improved connectivity and boosted tourism in the state. However, the construction of this infrastructure has caused significant environmental challenges. It has impacted the local flora and fauna in various ways.</p> <p>a. List any 3 effects of such developmental projects on the local environment.</p> <p>b. Write any 3 steps that can be implemented to restore greenery and promote environmental sustainability in the state.</p>		
Marking Scheme			

<i>Expected Response</i>	<i>Marks</i>	<i>Further information</i>
<p>a) 3 Effects of such developmental projects on the local environment:</p> <ul style="list-style-type: none"> -Loss of food sources: Deforestation can remove food sources like fruit and grass that animals rely on. -Loss of shelter: Deforestation can remove shelter for animals. -- Loss of breeding habitat: Deforestation can remove areas where animals can breed. -Reduced genetic diversity: Deforestation can divide forests into smaller patches, which can reduce genetic diversity. -Soil erosion: Deforestation can loosen the soil and make it more vulnerable to erosion. -Climate change: Deforestation can contribute to climate change by increasing greenhouse gases in the atmosphere. 	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 1 \frac{1}{2}$ (any 3 relevant pointers)	<p>Similar explanation with admissible alternate wording shall be accepted in line with the furnished pointers.</p> <p>-Award 0.25 for each pointer if its not very clear but makes sense in terms of the meaning as per the furnished pointers.</p> <p>If the response is unclear and not aligning to the pointers, no marks shall be awarded</p>
<p>b.) 3 Awareness initiatives</p> <ul style="list-style-type: none"> -Conversion of bare and non-cultivated land into forest. -We should minimize the use of timber and fuel wood. -There should be awareness programmes about the importance of forest and conservation. <p>Only the dry branches of trees must be used for fuel without damaging the entire plant.</p>	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 1 \frac{1}{2}$	<p>Similar explanation with admissible alternate wording shall be accepted in line with the furnished pointers.</p> <p>-Award 0.25 for each pointer if its not very clear but makes sense in terms of</p>
		<p>the meaning as per the furnished pointers.</p> <p>If the response is unclear and not aligning to the pointers, no marks shall be awarded</p>

Item: 109

<i>Class</i>	10	<i>Subject</i>	Biology
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Management of Natural resources
<i>Competency</i>	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
<i>Learning Outcome</i>	Explains about the traditional method of water harvesting.		
<i>Marks</i>	4		

<p>Item stem</p>	<p>In Rajasthan, the traditional Khadin system of water harvesting is widely practiced.</p> <p>a.) Draw the Khadin system with its main structures.</p> <p>b.) Write the principle of its functioning outlining 2 major benefits?</p>
<p>Marking Scheme</p>	
<p>Expected Students Response</p>	<p>Marks</p>
<p>a.</p> 	<p>$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ Marks (Showing catchment, cropped area, bund and dug well)</p> <p>$1 + \frac{1}{2} + \frac{1}{2} = 2$ Marks (Principle + 2 benefits)</p>
<p>Source - https://www.studiestoday.com/vbqs-science-cbse-class-10-science-sustainable-management-natural-resources-vbqs-403397.html</p> <p>b. It uses an earthen embankment called a bund to capture runoff water from rocky catchments and direct it to valleys.</p> <p>Any 2 Benefits:</p> <ol style="list-style-type: none"> 1. The Khadin system is a sustainable way to use water/ recharges ground water. 2. It's relatively inexpensive to install and maintain. 3. The system helps to maintain a balance of nutrients in the soil. 4. Enhances crops yield in dry arid regions 5. Reduces dependency on other sources of water. 	<p>Similar explanation with admissible alternate wording shall be accepted in line with the furnished pointers.</p> <p>-Award 0.25 M for each pointer if it's not very clear but makes sense in terms of the meaning as per the furnished pointers.</p> <p>-If the response is unclear and not aligning to the pointers, no marks shall be awarded.</p>

Item :110

<i>Class</i>	10	<i>Subject</i>	Biology
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Management of Natural resources
<i>competency</i>	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
<i>Learning Outcome</i>	Explains the dimensions of human- wildlife conflict.		
<i>Marks</i>	2		
<i>Item stem</i>	Poaching, illegal logging, and deforestation have led to animals venturing into farmers' fields. Explain how this situation poses risks to both humans and wildlife.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>		<i>Marks</i>	
Risk to wildlife: Due to decreased food availability and depleting forest covers, forest animals enter the fields for food and get killed by the villagers. Risk to humans: Wild animals damage the crops sown by farmers for their livelihood and for their income generation. Animals like tiger and leopards’ prey upon the cattle and also humans, thus endangering their lives.		$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ -Similar explanation with admissible alternate wording shall be accepted in line with the furnished pointers. -Award $\frac{1}{2}$ for each pointer if it’s not very clear but makes sense in terms of the meaning as per the furnished pointers. -If the response is unclear and not aligning to the pointers, no marks shall be awarded.	
Climate change, soil erosion, Habitat loss for millions of species, Increased risk of diseases, disturbs ecological balance, food chain and food webs and also economic values for production of food, medicine, honey etc.			

Class	10	Subject	Biology
Cognitive level	Understand	Content Domain	Management of Natural resources
Competency	C 4.3 Analyse different levels of biological organisation from organisms to ecosystems and biomes along with interactions that take place at each level.		
Learning Outcome	Describes ways and method to conserve environment realising the interdependence of human and wildlife.		
Marks	2		
Item stem	The Bishnoi community of Rajasthan has a deep connection with forest and wildlife conservation. a. Identify the member of the Bishnoi tribe who led the first movement against indiscriminate tree felling. b. Why do you think it is important to conserve forests and wildlife? Give any 3 reasons.		
Marking Scheme			
Expected Students Response		Marks	
a. Amrita Devi Bishnoi. b. (i) Forest and wildlife maintain ecological balance/ Organisms have unique place in food chain and food webs which keep ecological balance. (ii) It also contributes to maintain the water, carbon and nitrogen cycles. (iii) It should be preserved for its economic value as we get many useful products like food, medicine, honey, wax etc for us.		½ mark ½ + ½ + ½ = 1½ marks -Similar explanation with admissible alternate wording shall be accepted in line with the furnished pointers. -Award ½ for each pointer if it's clear OR not very clear but makes sense in terms of the meaning as per the furnished pointers. -If the response is unclear and not aligning to the pointers no marks shall be awarded.	

Mathematics Item Bank 2025 – MBSE

Introduction

A workshop was organised by the Mizoram Board of School Education in January 2025 with the following objectives.

1. Unpacking the meaning of competency-based assessment using the NCF-SE Learning Standards.
2. Working in subject groups to see the interlinkages of learning standards with our textbooks and assessment.
3. Review of MBSE class 10 board exam question papers.

The output of the workshop was development of some sample items, which have been compiled in this document. The items designed by the 11 participants during the workshop have been reviewed and finalized, in alignment with NCF SE learning standards and the quality parameters of competency based assessment. There are 46 Multiple Choice Questions and 49 Constructed Response Questions in this document.

Summary of the list of items

Cognitive Levels -->	Remember				Understand				Apply				Analyse				Evaluate				Total number of items
Marks -->	1	2	3	5	1	2	3	5	1	2	3	5	1	2	3	5	1	2	3	5	
Content Domain																					
Arithmetic	1								2		2										5
Algebra	2	1			3	1			3		4	1	3	2	2	1			1	1	25
Sets			1		2	1			3				1								8
Coordinate Geometry	1								2	2	2		1								8
Geometry					1				3	2	3				2		1	1			13
Trigonometry					1				2			3	1		1						8
Mensuration									6	5	2	1	2	1	1				1	1	20
Statistics			1		2				3		1									1	8
Total number of items	4	1	2		9	2			24	9	14	5	8	3	6	1	1	1	2	3	95

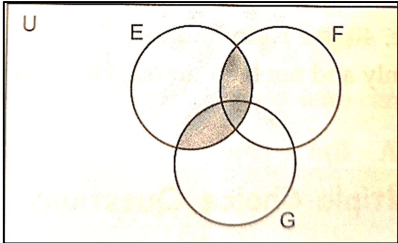
MCQ: 1

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Statistics
Competency	C-6.2 Applies concepts from probability to solve problems on the likelihood of everyday events		
Learning Outcome	Determines probability of an event and applies the concept in solving the daily life problems.		
Item stem	From a well – shuffled deck of cards, two cards are drawn at random one after the other, without replacement. What is the probability that the second card is a red king given that the first card drawn was also a red king?		
Key	$\frac{1}{51}$		
Distractor 1	$\frac{1}{52}$		
Distractor 2	$\frac{2}{52}$		
Distractor 3	$\frac{2}{51}$		

MCQ: 2

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-8.1 Models daily-life phenomena and uses representations such as graphs, tables, and equations to draw conclusions		
Learning Outcome	Applies formulas of areas and lengths related circles to solve mathematical and/or real-world problems		
Item stem	The radius of a circular wall clock is 14cm. What is the area of the minor part of the face of the wall clock between the hour hand and the minute hand when it is exactly 2:30 PM?		
Key	$\frac{539}{3} \text{ cm}^2$		
Distractor 1	$\frac{616}{3} \text{ cm}^2$		
Distractor 2	$\frac{1309}{3} \text{ cm}^2$		
Distractor 3	$\frac{77}{3} \text{ cm}^2$		

MCQ: 3

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Sets
Competency	*		
Learning Outcome	Interprets a Venn diagram on operations of sets		
Item stem	<p>What does the unshaded portion in the given Venn diagram represent?</p> 		
Key	$E' \cup (F' \cap G')$		
Distractor 1	$E \cap (F \cup G)$		
Distractor 2	$E \cup (F \cap G)$		
Distractor 3	$E' \cap (F' \cup G')$		

MCQ 4

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
Learning Outcome	Uses formulas on areas and lengths related to circles to find unknown measurements.		
Item stem	If a square of side 6 cm is inscribed in a circle, then what is the area of the circle?		
Key	18π sq.cm		
Distractor 1	9π sq.cm		
Distractor 2	36π sq.cm		
Distractor 3	72π sq.cm		

MCQ 5

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Trigonometry
Competency	C-4.6 Understands the definitions of the basic trigonometric functions, their history and motivation (including the introduction of the sin and cos functions by Aryabhata using chords), and their utility across the sciences		
Learning Outcome	Justifies expressions based on trigonometric ratios and identities		
Item stem	Which among the following expression is equal to 1?		

	(i) $(1 - \cos^2 A)(\cot^2 A - 1)$ (ii) $9\tan^2 A - 9\sec^2 A$
Key	Only (i)
Distractor 1	Only (ii)
Distractor 2	Both (i) and (ii)
Distractor 3	Neither (i) nor (ii)

MCQ 6

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Trigonometry
Competency	C-4.6 Understands the definitions of the basic trigonometric functions, their history and motivation (including the introduction of the sin and cos functions by Aryabhata using chords), and their utility across the sciences		
Learning Outcome	Simplifies expressions based on trigonometric ratios and identities		
Item stem	If $x = a \cos \theta$ and $y = b \sin \theta$, then which expression represents a^2b^2 ?		
Key	$b^2x^2 + a^2y^2$		
Distractor 1	$b^2x^2 - a^2y^2$		
Distractor 2	$b^2x + a^2y^2$		
Distractor 3	$ax^2 + by^2$		

MCQ 7

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Algebra
Competency	C-8.1 Models daily-life phenomena and uses representations such as graphs, tables, and equations to draw conclusions.		
Learning Outcome	Relates the value of the discriminant to the nature of the roots		
Item stem	<p>A statement of assertion is given below, followed by a statement of reason.</p> <p>Assertion: A children's park of area 220 m^2 can be designed as a rectangle with its length 15 m more than its breadth.</p> <p>Reason: A quadratic equation will have real roots if the discriminant is a perfect square. Which among the following is true?</p>		
Key	Both Assertion and Reason are true, but Reason is not the correct explanation for Assertion.		
Distractor 1	Both Assertion and Reason are true, and Reason is the correct explanation for Assertion.		
Distractor 2	Assertion is true, but Reason is false.		
Distractor 3	Assertion is false, but Reason is true.		

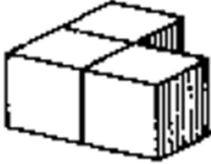
MCQ 8

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-8.1 Models daily-life phenomena and uses representations such as graphs, tables, and equations to draw conclusions		
Learning Outcome	Applies formulas of areas and lengths related circles to solve mathematical and/or real-world problems.		
Item stem	A buffalo is tied with a rope of length one-third of the side of a square grassy lawn of 18m at the corner. What is the area of the grassy lawn which the buffalo can graze?		
Key	$9\pi \text{ m}^2$		
Distractor 1	324 m^2		
Distractor 2	108 m^2		
Distractor 3	$2\pi \text{ m}^2$		

MCQ 9

Class	10	Subject	Mathematics
Cognitive level	Remember	Content Domain	Coordinate Geometry
Competency	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry		
Learning Outcome	Applies distance formula to find the length of a line segment.		
Item stem	The vertices of a square are (-4, 1), (-7, -2), C (-4, -5) and (-3,1), taken in order. What is the length of the side of the square?		
Key	$3\sqrt{2}$ units		
Distractor 1	$2\sqrt{3}$ units		
Distractor 2	$5\sqrt{2}$ units		
Distractor 3	6 units		

MCQ 10

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects		
Learning Outcome	Uses surface area and volume formulas of 3D shapes to solve real life problems related to combined solids		
Item stem	<p>Three cubes, each of 5 cm edges, are joined to form a new solid, as given in the figure.</p>  <p>What is the surface area of the solid formed?</p>		
Key	350 cm ²		
Distractor 1	450 cm ²		
Distractor 2	375 cm ²		
Distractor 3	300 cm ²		

MCQ 11

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Algebra
Competency	*		
Learning Outcome	Examines the statements using the concepts related to Arithmetic Progression.		
Item stem	<p>An Arithmetic Progression has 21 terms. Its middle term is 10. Statement (i): Sum of the terms in the Arithmetic Progression is 210. Statement (ii): The 10th term of the Arithmetic Progression is 10.</p>		
Key	Only (i) is true		
Distractor 1	Only (ii) is true		
Distractor 2	Both (i) and (ii) are true		
Distractor 3	Neither (i) nor (ii) are true		

MCQ 12

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Algebra
Competency	C-3.2 Models and solves contextualised problems using equations (e.g., simultaneous linear equations in two variables or single polynomial equations) and draws conclusions about a situation being modelled		
Learning Outcome	Forms two linear equations in two variables using given data.		
Item stem	In an examination, 2 marks are awarded for every correct answer while 1 mark is deducted for every wrong answer. A student answered 150 questions and got 90 marks. Which among the following system of equations represent the given information to find the total number of questions answered by the student?		
Key	$x + y = 150$ $2x - y = 90$		
Distractor 1	$x - y = 90$ $2x + y = 150$		
Distractor 2	$x - y = 150$ $2x + y = 90$		
Distractor 3	$x + y = 90$ $2x - y = 150$		

MCQ 13

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Algebra
Competency	*		
Learning Outcome	Finds unknowns using the formulas for the sum to n terms and the nth term.		
Item stem	The terms of Arithmetic Progression are in increasing order of magnitude. If the difference between the 19 th and the 15 th terms is 36, what is the common difference?		
Key	9		
Distractor 1	$\frac{9}{8}$		
Distractor 2	$\frac{-9}{8}$		
Distractor 3	-9		

MCQ 14

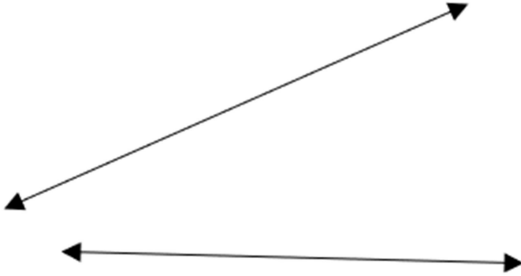
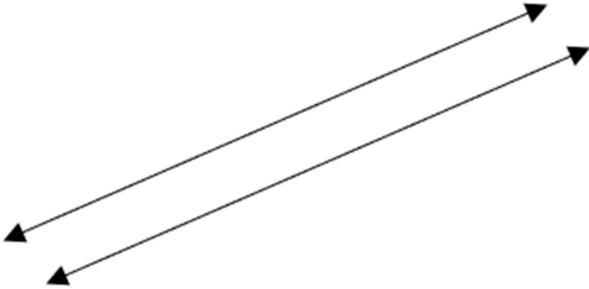
Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Geometry
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
Learning Outcome	Uses the concepts of circles in solving problems.		
Item stem	The angle subtended by a chord AB at a point on the circle is 60° . What is the central angle of the major arc formed by chord AB?		
Key	240°		
Distractor 1	30°		
Distractor 2	60°		
Distractor 3	120°		

MCQ 15

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Statistics
Competency	C-6.2 Applies concepts from probability to solve problems on the likelihood of everyday events.		
Learning Outcome	Calculates the probability for an event of a given random experiment.		
Item stem	Two dice are thrown simultaneously. What is the probability that the sum of the numbers that appear above is 8 and the product of these numbers is odd?		
Key	$\frac{1}{18}$		
Distractor 1	$\frac{5}{36}$		
Distractor 2	$\frac{5}{12}$		
Distractor 3	$\frac{1}{6}$		

MCQ 16

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Algebra
Competency	C-8.1 Models daily-life phenomena and uses representations such as graphs, tables, and equations to draw conclusions		
Learning Outcome	Identifies the number of solutions for a system of linear equations from the graph		

Item stem	Which of the following graphs represent(s) a consistent system of linear equations ?
	Graph 1:
	
	Graph 2:
	
Key	Graph 1 and graph 3
	Distractor 1 Graph 2
	Distractor 2 Graph 2 and graph 3
	Distractor 3 Graph 3

MCQ 17

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Sets
Competency	*		
Learning Outcome	Uses the concepts related to sets to solve contextual problems.		
Item stem	In a survey of 100 students, 60 like to sing, 50 like to dance and 30 like both, what is the number of students who like neither singing nor dancing?		
Key	20		
Distractor 1	10		
Distractor 2	70		
Distractor 3	110		

MCQ 18

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Statistics
Competency	C-6.2 Applies concepts from probability to solve problems on the likelihood of everyday events.		
Learning Outcome	Calculates the probability of a given event.		
Item stem	From a pack of 52 playing cards, all black face cards are removed. If one card is drawn at random from the remaining cards, what is the probability that it is a Queen?		
Key	$\frac{1}{23}$		
Distractor 1	$\frac{1}{26}$		
Distractor 2	$\frac{2}{23}$		
Distractor 3	$\frac{1}{52}$		

MCQ 19

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Algebra
Competency	C-3.2 Models and solves contextualised problems using equations (e.g., simultaneous linear equations in two variables or single polynomial equations) and draws conclusions about a situation being modelled.		
Learning Outcome	Frames equations to solve a problem related to real life		
Item stem	In an examination, 2 marks are awarded for every correct answer while 1 mark is deducted for every wrong answer. A student answered 150 questions and got 90 marks. Which pair of equations below can be used to find the number of correct answers attempted?		
Key	$x + y = 150$; $2x - y = 90$		
Distractor 1	$x - y = 90$; $2x + y = 150$		
Distractor 2	$x - y = 150$; $2x + y = 90$		
Distractor 3	$x + y = 90$; $2x - y = 150$		

MCQ 20

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C - 4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
Learning Outcome	Finds the circumference of an inscribed circle.		
Item stem	A wire of length 28 units is bent to form a square. What is the circumference of the largest circle which can be inscribed in the square?		
Key	22 units		
Distractor 1	154 units		
Distractor 2	44 units		
Distractor 3	11 units		

MCQ 21

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Statistics
Competency	C-6.1 Applies measures of central tendencies such as mean, median, and mode		
Learning Outcome	Relates the three measures of central tendency		
Item stem	Which among the following is the correct relation between the mean, median and mode of a distribution given by x, y and z respectively?		
Key	$3x - 2y - z = 0$		
Distractor 1	$x - 2y - 3z = 0$		
Distractor 2	$2x - y - 3z = 0$		
Distractor 3	$2y - 3x - z = 0$		

MCQ 22

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Sets
Competency	*		
Learning Outcome	Interprets the complement of a set.		
Item stem	For any set A, which among the following is equal to $[(A')']$?		
Key	A		
Distractor 1	A'		
Distractor 2	\emptyset		
Distractor 3	U		

MCQ 23

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Sets
Competency	*		
Learning Outcome	Applies the concept of Venn diagram to solve problems.		
Item stem	28 students at a school enrolled for engineering and medical entrance tests in an academic year. Among them, 13 enrollments were for medical stream while 5 of them enrolled for both. How many students enrolled only for engineering entrance test?		
Key	15		
Distractor 1	20		
Distractor 2	10		
Distractor 3	8		

MCQ 24

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Coordinate Geometry
Competency	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry		
Learning Outcome	Uses distance formula to calculate distance between two given points.		
Item stem	What is the distance of the point (a + b, a - b) from the origin, for some integers a and b?		
Key	$\sqrt{2(a^2 + b^2)}$ units		
Distractor 1	$2\sqrt{ab}$ units		
Distractor 2	$\sqrt{2}ab$ units		
Distractor 3	$2\sqrt{a^2 + b^2}$ units		

MCQ 25

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects		
Learning Outcome	Applies the concept of conservation of volume to given objects.		
Item stem	A metallic hemispherical bowl of radius 'r' was melted and converted to a cylindrical wire of length 'r'. What is the radius of the wire?		
Key	$\sqrt{\frac{2}{3}} r$		
Distractor 1	r		
Distractor 2	2r		
Distractor 3	$\sqrt{\frac{2}{3}} r$		

MCQ 26

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Coordinate Geometry
Competency	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry		
Learning Outcome	Applies midpoint formula to find the unknown values.		
Item stem	A circle passes through the origin. What are the coordinates of the other end of a diameter drawn from the origin if the centre of the circle is at (2, -4)?		
Key	(4, -8)		
Distractor 1	(-2, 4)		
Distractor 2	(0, 0)		
Distractor 3	(1, -2)		

MCQ 27

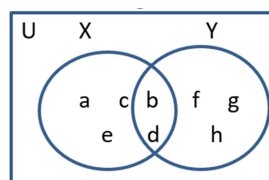
Class	10	Subject	Mathematics
Cognitive level	Remember	Content Domain	Arithmetic
Competency	*		
Learning Outcome	Uses the relation between speed, time and distance to solve problems.		
Item stem	A bus running at a speed of 36 km/hr passes an electric pole in 2 seconds. What could be the length of the bus?		
Key	20 m		
Distractor 1	18 m		
Distractor 2	72 m		
Distractor 3	120 m		

MCQ 28

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Trigonometry
Competency	C-4.6 Understands the definitions of the basic trigonometric functions, their history and motivation, and their utility across the sciences		
Learning Outcome	Interprets the statements using Trigonometric ratios		
Item stem	<p>Given below is a statement of Assertion, followed by a statement of Reason. Assertion: In triangle ABC, right-angled at B, if $\cot A = \frac{3}{4}$, then $\operatorname{cosec} A = \frac{4}{5}$.</p> <p>Reason: Sin A is the ratio of the side opposite to $\angle A$ and the hypotenuse.</p> <p>Choose the correct option.</p>		
Key	Assertion is false, but Reason is true		
Distractor 1	Both Assertion and Reason are true, and the Reason is the correct explanation for Assertion		
Distractor 2	Both Assertion and Reason are true, but the Reason is not the correct explanation for Assertion		
Distractor 3	Assertion is true, but Reason is false		

MCQ 29

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Sets
Competency	*		
Learning Outcome	Interprets the Venn diagram in terms of set operations		
Item stem	<p>For the given Venn Diagram, which among the statements is/are true?</p> <p>Statement (i): $X \cap Y = \{a, b, c, d, e, f, g, h\}$</p> <p>Statement (ii): $X - Y = \{a, c, e\}$</p>		
Key	Only Statement (ii) is correct		
Distractor 1	Only Statement (i) is correct		
Distractor 2	Both Statement (i) and (ii) are correct		
Distractor 3	Both Statement (i) and (ii) are incorrect		



following

MCQ: 30

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Coordinate Geometry
Competency	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry, e.g., plotting a pair of linear equations and graphically finding the solution, or finding the area of triangle with given coordinates as vertices		
Learning Outcome	Uses distance formula and properties of quadrilaterals		
Item stem	<p>Consider the vertices A(6, 2), B(9, 1), C(10, 4), D(7, 5) of a quadrilateral ABCD on a plane. Read the two statements and choose the correct option.</p> <p>Statement I: ABCD forms a square Statement II: AC and BD meet at point (8,3).</p>		
Key	Both statements I and II are true		
Distractor 1	Only statement I is true		
Distractor 2	Only statement II is true		
Distractor 3	Both statements I and II are false		

MCQ 31

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Identifies situations where two volumes are equal and/or where two surface areas are equal.		
Item stem	<p>Two identical cylinders are taken.</p> <p>Situation A: One cylinder is melted to make six identical cones, each having the same radius as the cylinder and half the height of the cylinder.</p> <p>Situation B: Another cylinder is melted to make four identical cones, each having half the radius of the cylinder and the same height as the cylinder.</p> <p>Which among the following is true?</p>		
Key	Situation A is correct, and Situation B is incorrect		
Distractor 1	Situation A and Situation B are correct		
Distractor 2	Situation A is incorrect, and Situation B is correct		
Distractor 3	Situation A and Situation B are incorrect		

MCQ 32

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Statistics
Competency	C-6.1 Applies measures of central tendencies such as mean, median, and mode		
Learning Outcome	Interprets the meaning of mean, median and mode for a given data		
Item stem	<p>Given a statement of assertion (A) followed by a statement of reason (R).</p> <p>Assertion: The mode and mean is given as 5 and 4 respectively then the median is $\frac{13}{3}$.</p> <p>Reason: The relationship between mean, median and mode can be seen as thrice the mean of a data added to the mode is equal to twice the median.</p> <p>Which of the following is correct?</p>		
Key	Assertion (A) is true, but Reason (R) is false		
Distractor 1	Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A)		
Distractor 2	Both Assertion (A) and Reason (R) are true, and Reason (R) is the not the correct explanation of Assertion (A)		
Distractor 3	Assertion (A) is false, but Reason (R) is true		

MCQ 33

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Arithmetic
Competency	*		
Learning Outcome	Uses distance and speed relation to solve daily life problems		
Item stem	Kimi's home is 5 km from the park, while Kia's home is 7 km away. Kimi runs at a speed of 1.5 m/s, and Kia runs at 2 m/s. Which of the following situations is correct?		
Key	Kia should start the walk around 3 minutes earlier to reach their homes at the same time		
Distractor 1	Kimi should start the walk around 3 minutes earlier to reach their homes at the same time		
Distractor 2	Kia should start the walk around 7 minutes earlier to reach their homes at the same time		
Distractor 3	Kimi should start the walk around 7 minutes earlier to reach their homes at the same time		

MCQ 34

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Arithmetic
Competency	*		
Learning Outcome	Uses distance and speed relation to solve daily life problems		
Item stem	<p>For the school sports day, two sets of tracks and pits are needed for junior and senior students. Group A takes 10 days, working 2 hours per day, to complete the senior tracks and pits. Group B takes 6 days, working 5 hours per day, for the junior tracks and pits. How many hours per day must they work together to complete both sets in 6 days?</p>		
Key	4 hours		
Distractor 1	2 hours		
Distractor 2	3 hours		
Distractor 3	5 hours		

MCQ 35

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Algebra
Competency	*		
Learning Outcome	Finds unknowns using the formulas for the nth term		
Item stem	Which expression could be the nth term of the arithmetic progression whose first term is 5 and its 17 th term exceeds its 10 th term by 21?		
Key	$3n+2$		
Distractor 1	$n+4$		
Distractor 2	$2n+3$		
Distractor 3	$3n-2$		

MCQ 36

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Uses surface area and volume formulas of 3D shapes to solve real life problems related to frustum and combined solids.		
Item stem	<p>Given a statement of assertion (A) followed by a statement of reason(R).</p> <p>Assertion (A): Eight cubes each of edge a units are joined end to end to form a cube, and the surface area that can be painted is $24a^2$ square units.</p> <p>Reason (R): If eight cubes each of edge a units are joined end to end to form a cube, then the surface area that can be painted is sum of the surface areas of all the cubes.</p> <p>Which of the following is correct?</p>		
Key	Assertion (A) is true, but Reason (R) is false		
Distractor 1	Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A)		
Distractor 2	Both Assertion (A) and Reason (R) are true, but Reason (R) is the not the correct explanation of Assertion (A)		
Distractor 3	Assertion (A) is false, but Reason (R) is true		

MCQ 37

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Algebra
Competency	*		
Learning Outcome	Expresses a given real-life problem in terms of an arithmetic progression and solves it		
Item stem	In a 1500 meters long distance running competition in school, Preetham runs first 100 meters in 16 seconds and finishes subsequent 100 meters taking additional 2 seconds each time. What is time taken by Preetham to finish 1500 meters run?		
Key	7 minutes 30 seconds		
Distractor 1	7 minutes 45 seconds		
Distractor 2	7 minutes 50 seconds		
Distractor 3	7 minutes 15 seconds		

MCQ 38

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Algebra
Competency	C-3.3 Learns Brahmagupta's quadratic formula (in both symbolic and poetic form) and its derivation, and uses it to solve some of the poetic puzzles of Bhaskara as well as modern-day problems		
Learning Outcome	Analyses the nature of roots based on the discriminant of a quadratic equation.		
Item stem	In the following questions a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct answer from the following options. Assertion (A): The quadratic equation $3x^2 - 9x + 6 = 0$ has distinct integral roots. Reason (R): The quadratic equation $ax^2 + bx + c = 0$ has distinct real roots if $b^2 - 4ac > 0$.		
Key	Both Assertion (A) and Reason (R) are true, and Reason (R) is not the correct explanation of Assertion (A)		
Distractor 1	Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A)		
Distractor 2	Assertion (A) is true, but Reason (R) is false		
Distractor 3	Assertion (A) is false, but Reason (R) is true		

MCQ 39

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Trigonometry
Competency	C-4.6 Understands the definitions of the basic trigonometric functions, their history and motivation (including the introduction of the sin and cos functions by Aryabhata using chords), and their utility across the sciences		
Learning Outcome	Simplifies trigonometric expression based on the values of trigonometric ratios and trigonometric identities.		
Item stem	Which of the following expressions has a value of zero? (I) $\sin 55^\circ - \cos 35^\circ$ (II) $\tan 55^\circ - \cot 55^\circ$ (III) $\sec 55^\circ - \operatorname{cosec} 55^\circ$		
Key	Only (I)		
Distractor 1	Only (II)		
Distractor 2	Only (I) and (III)		
Distractor 3	Only (II) and (III)		

MCQ 40

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Sets
Competency	*		
Learning Outcome	Establishes the relationship between the given sets.		
Item stem	Read the given statements and choose the correct option. I: If $A = \{1,2\}$ and $B = \{1, 2, 3\}$ then A is a subset of B. II: If $A = \{1,2\}$ and $B = \{1, 2, 3\}$ then B is a superset of A. III: The power set of $\{1, 2\}$ is $\{\{1\}, \{2\}, \{1,2\}\}$.		
Key	Only I and II are true		
Distractor 1	Only II is true		
Distractor 2	Only III is true		
Distractor 3	Only I and III are true		

MCQ 41

Class	10	Subject	Mathematics
Cognitive level	Remember	Content Domain	Algebra
Competency	*		
Learning Outcome	Finds HCF of algebraic expressions		
Item stem	What is the HCF of the numerator and denominator of the rational expression $\frac{(x+1)}{(x^2 - 2x+1)}$ with third polynomial $(x+1)(x-2)$?		
Key	1		
Distractor 1	0		
Distractor 2	$(x+1)$		
Distractor 3	$(x-2)$		

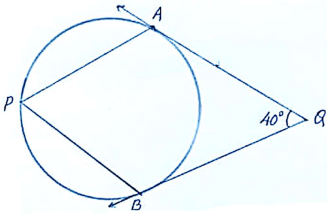
MCQ 42

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Geometry
Competency	*		
Learning Outcome	Identifies the number of tangents in a given condition.		
Item stem	Manoj draws two concentric circles, then how many common tangents do they have?		
Key	0		
Distractor 1	1		
Distractor 2	2		
Distractor 3	4		

MCQ 43

Class	10	Subject	Mathematics
Cognitive level	Remember	Content Domain	Algebra
Competency	C-3.3 Learns Brahmagupta's quadratic formula (in both symbolic and poetic form) and its derivation and uses it to solve some of the poetic puzzles of Bhaskara as well as modern-day problems.		
Learning Outcome	Uses the concept of discriminant to find the unknown values.		
Item stem	For what value(s) of 'k' will the quadratic equation $kx^2 = 2kx - 6$ have equal roots?		
Key	6		
Distractor 1	0		
Distractor 2	0 or 6		
Distractor 3	4 or 6		

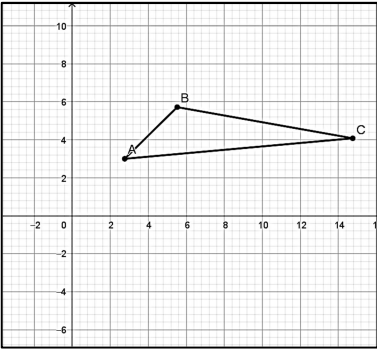
MCQ 44

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Geometry
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
Learning Outcome	Applies the properties of chords and tangents to solve problems.		
Item stem	<p>AQ and BQ are tangents drawn to a circle from an external point Q, which are inclined at 40° with each other. If AP and BP are two chords of the circle, what is the value of $\angle APB$?</p> 		
Key	70°		
Distractor 1	40°		
Distractor 2	80°		
Distractor 3	140°		

MCQ 45

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Geometry
Competency	C-4.2 Proves theorems using Euclid's axioms and postulates for triangles and quadrilaterals, and applies them to solve geometric problems		
Learning Outcome	Interprets the properties of similar triangles		
Item stem	$\triangle ABC \sim \triangle DEF$. If their perimeters are in the ratio 9:16, what is the ratio of their areas?		
Key	81:256		
Distractor 1	9:16		
Distractor 2	3:4		
Distractor 3	18:32		

MCQ 46

Class	10	Subject	Mathematics
Cognitive level	Evaluate	Content Domain	Geometry
Competency	C-4.2 Proves theorems using Euclid's axioms and postulates for triangles and quadrilaterals, and applies them to solve geometric problems		
Learning Outcome	Checks the possibilities to form a similar triangle		
Item stem	<p>Which of the methods is/are suitable to make a triangle similar to the given triangle?</p>  <p>Method A: Make a reflection of the triangle along x-axis.</p> <p>Method B: Scale up sides and angles to a certain ratio.</p>		
Key	Only A		
Distractor 1	Only B		
Distractor 2	Both A and B		
Distractor 3	Neither A nor B		

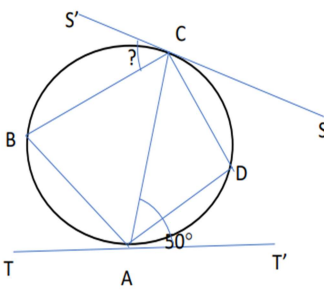
CRQ 1

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Algebra
Competency	C-3.2 Models and solves contextualised problems using equations (e.g., simultaneous linear equations in two variables or single polynomial equations) and draws conclusions about a situation being modelled.		
Learning Outcome	Relates the value of the discriminant to the nature of the roots.		
Marks	2		
Item stem	<p>Given below are Muana’s and Sanga’s responses to a question on finding the nature of roots of a quadratic equation $x^2 - x = 4$.</p> <p>Muana: $D = 1 - 16 = -15 < 0$. So, the equation has no real roots. Sanga: $D = 1 + 16 = 17 > 0$. So, the equation has two real roots.</p> <p>Determine who identified the nature of the equation correctly. Give reason to support your answer.</p>		
Marking Scheme			
Expected Student’s Response			Marks
Writes that Sanga has done it correctly.			1
Explains that Muana went wrong in writing the equation in standard form or in using the formula of discriminant. Muana has taken $D = 1^2 - 4 \times 1 \times 4$, instead of $1^2 - 4 \times 1 \times (-4) = 17$. Sanga is correct in calculation and identifying the correct number of roots.			1
Note: If the explanation is partially correct, 0.5 marks should be awarded.			

CRQ 2

Class	10	Subject	Mathematics
Cognitive level	Remember	Content Domain	Algebra
Competency	*		
Learning Outcome	Performs operations on polynomials.		
Marks	2		
Item stem	Divide the polynomial $\frac{x-1}{x+2}$ with its multiplicative inverse and reduce it to its lowest term.		
Marking Scheme			
Expected Student's Response			Marks
Remembering the Multiplicative Inverse of $\frac{x-1}{x+2}$ is $\frac{x+2}{x-1}$			0.5
Framing the expression $\frac{x-1}{x+2} \div \frac{x+2}{x-1}$			0.5
Simplifying $\frac{x-1}{x+2} \times \frac{x-1}{x+2}$ to get $\frac{(x-1)^2}{(x+2)^2}$			1

CRQ 3

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Geometry
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π .		
Learning Outcome	Applies theorems on circles to find unknown values.		
Marks	2		
Item stem	<div><div><p>In the given figure, AB is a chord. TAT' and SBS' are tangents to the circle. If $\angle CAT' = 50^\circ$. find $\angle BCS'$.</p></div><div></div></div>		
Marking Scheme			
Expected Student's Response		Marks	
Uses alternate segment theorem to find $\angle ABC = \angle CAT' = 50^\circ$		0.5	
Recognises and applies cyclic quadrilateral ABCD to find $\angle D$. $\angle D = 180 - \angle C = 130^\circ$		1	
Identifies chord CA and line SC S' tangent at C. Applies alternate segment theorem to get $\angle BCS' = \angle D = 130^\circ$		0.5	

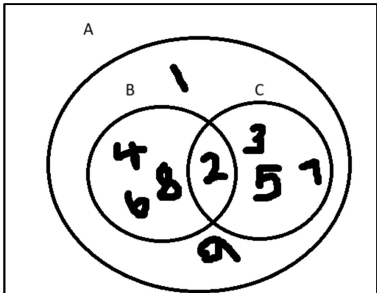
CRQ 4

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Coordinate Geometry
Competency	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry		
Learning Outcome	Solves problems in mathematical context using section formula.		
Marks	2		
Item stem	The line segment formed by joining the points P (4, −5) and Q (4, 3) has a point R on it such that PR:PQ = 1:4. In what ratio does R divide PQ internally? Also, find the coordinates of R.		
Marking Scheme			
Expected Student's Response			Marks
Finds PR:RQ = 1:3			0.5
Uses section formula $\left(\frac{(1 \times 4 + 3 \times 4)}{4}, \frac{(1 \times 3 + 3 \times -5)}{4}\right)$			1
Simplifies and finds coordinates of R (4, -3)			0.5

CRQ 5

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Sets
Competency	*		
Learning Outcome	Represents operations on sets using Venn diagram		
Marks	2		
Item stem	If A= Set of all natural numbers less than 10, B = Set of all natural even numbers less than 10 and C = Set of all prime numbers less than 10, represent $A \cap B \cap C$ using Venn diagram.		

Marking Scheme

Expected Student's Response	Marks
Converting the sets to Roster form $A = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$ $B = \{2, 4, 6, 8\}$ $C = \{2, 3, 5, 7\}$	0.5 [Note: award 0.5 mark if any two sets are correctly written in roster form]
Identifies $A \cap B \cap C = \{2\}$	0.5
Represents the sets in a Venn diagram appropriately. 	1
[Note: $A \cap B \cap C$ might be shaded also.]	

CRQ 6

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Algebra
Competency	*		
Learning Outcome	Solves real life/mathematical world problems based on Arithmetic Progression		
Marks	2		
Item stem	Mahlimi writes an arithmetic progression (AP) consisting of 57 terms such that the average of the terms in the AP is zero. She claims that one of its terms is zero. Which term of the AP is zero? Justify your answer.		
Marking Scheme			
Expected Student's Response			Marks
Represents the given information mathematically as $S_{57} = 0$ that is $\frac{57}{2}(2a + 56d) = 0$			1
Arrives at the equation $a + 23d = 0$.			0.5
Concludes that 24 th term is 0 in the AP.			0.5

CRQ 7

Class	10	Subject	Mathematics
Cognitive level	Understand	Content Domain	Algebra
Competency	*		
Learning Outcome	Solves real life/mathematical problem using the concepts of an arithmetic progression		
Marks	2		
Item stem	Which term of the AP 8, 5, 2, -1, ... will be 15 less than its 11 th term?		
Marking Scheme			
Expected Student's Response			Marks
Writes $a = 8$ and $d = 5 - 8 = -3$			0.5
Finds a_{11} and $a_{11} - 15$ as $a_{11} - 15 = 8 + 10(-3) - 15 = -37$			0.5
Finds 'n' by equating formula of a_n and with $a_{11} - 15$ ie, $a + (n - 1)d = a_{11} - 15$ Resulting in $n = 16$			0.5
Note: 1 mark could be awarded for calculation of n by using $a + (n - 1)d = a_{11} - 15$ directly			
Writes the result $n=16$ and states 16 th term is 15 less than its 11 th term			0.5

CRQ 8

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Solves problems on surface area and volume formulas in real world situations.		
Marks	2		
Item stem	A cuboidal vessel of base area 900 sq. cm is filled with water up to a height of 9 cm. Five iron cones each of volume 180 cm^3 is immersed completely in water. Find the increase in height of water level.		
Marking Scheme			
Expected Student's Response			Marks
Interprets that Volume of water displaced = Volume of 5 cones.			0.5
Calculates Volume of water displaced = $5 \times 180 = 900\text{ cm}^3$			0.5
By taking Volume of water displaced = Base area \times Height of water displaced, arrives at $900h = 900$			0.5
Calculates height $h = 1\text{ cm}$			0.5


CRQ 9

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Solves problems using the formulas for surface area and volume of solids		
Marks	2		
Item stem	A metallic solid cone was melted and recast in the form of a solid sphere. If the radius of the sphere was equal to the height of the cone, what is the ratio of the height and radius of the cone?		
Marking Scheme			
Expected Student's Response			Marks
Expresses the volume of the sphere formed as $\frac{4}{3}\pi h^3$			0.5
Equates the volume of cone and sphere to get $\frac{1}{3}\pi r^2 h = \frac{4}{3}\pi h^3$			0.5
Simplifies the equation to get $r^2 = 4h^2$ or $r = 2h$			0.5
Writes the required ratio as 1:2			0.5

CRQ 10

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Uses surface area and volume formulas of 3D shapes to solve real life problems related to combined solids.		
Marks	2		
Item stem	Zba carves a wooden sphere of radius of 4 cm, transforming it into a craft with two hemispheres of radii 4 cm and 3 cm with the same centre such that their bases are attached. Find the region that Zba needs to be painted on the wooden craft.		
Marking Scheme			
Expected Student's Response			Marks
Calculates CSA of smaller hemisphere using the formula $2\pi r^2$ to get $18\pi \text{ cm}^2$			0.5
Calculates CSA of bigger hemisphere using the formula $2\pi R^2$ to get $32\pi \text{ cm}^2$			0.5
Calculates the uncovered region on the flat surface of the bigger hemisphere as Area of bigger circle – Area of smaller circle = $\pi(16 - 9) = 7\pi \text{ cm}^2$			0.5
Calculates the total uncover region as $18\pi + 32\pi + 7\pi = 57\pi \text{ cm}^2$			0.5

CRQ 11

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
Learning Outcome	Applies formulas of areas and lengths related circles to solve mathematical and/or real-world problems.		
Marks	2		
Item stem	<div><div>In a multicoloured paper wheel with each colour same area and outer circumference of 88 cm, a with a radius of 6 cm is cut out as shown in the area covered by the green colour.</div><div></div><div>occupying circular region figure. Find the</div></div>		
Marking Scheme			
Expected Student's Response			Marks
Calculates the outer radius $R = 14cm$ using the given information on outer circumference of 88cm			0.5

Represents the area covered by green colour as $\frac{1}{6}(\pi R^2 - \pi r^2) = \frac{\pi}{6}(R^2 - r^2)$ OR Represents the area covered by green colour as $\frac{60^\circ}{360^\circ}(\pi R^2 - \pi r^2) = \frac{\pi}{6}(R^2 - r^2)$ Note: Both ways of answering can be accepted	0.5
Substitutes the values correctly and calculates the area covered by green colour as $\frac{1760}{21} \text{ cm}^2$	1 (0.5 mark for correct substitution 0.5 mark for correct calculation)

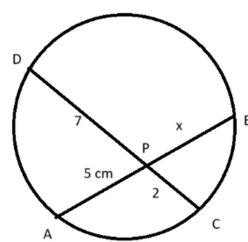
CRQ 12

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Solves problems using the concepts of surface area and volume of solids		
Marks	2		
Item stem	A cuboidal water tank with dimensions 4 m × 3 m × 2 m is fully filled with water. If half of the water is transferred to an empty cylindrical tank of radius 2 m, does the water level in the cylindrical tank rise beyond 1 m? Justify. (Use $\pi = 22/7$)		
Marking Scheme			
Expected Student's Response			Marks
Finds volume of the water in the cuboidal tank as 24 m ³			0.5
Identifies the volume of water transferred to the cylindrical tank as 12 m ³ and using the formula for volume of cylinder to get $\frac{22}{7} \times 2 \times 2 \times h = 12$			0.5
Solves the above equation to get $h = \frac{21}{22} = 0.95$, approximately			0.5
Concludes that the water level does not rise beyond 1m.			0.5

CRQ 13

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Coordinate Geometry
Competency	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry		
Learning Outcome	Uses the concept of section formula to solve problems.		
Marks	2		
Item stem	The medians of ΔABC pass through the point (3, 4). If two vertices of the triangle are (6, 4) and (-2, 2), find the co-ordinates of the third vertex.		
Marking Scheme			
Expected Student's Response			Marks
Recognises that (3, 4) is the centroid of ΔABC and takes the third vertex as (x, y).			0.5
Using the formula for centroid to get the equations $\frac{x+6+(-2)}{3} = 3$ and $\frac{y+4+2}{3} = 4$			1 (0.5 for each equation)
Solves the equations to get the third vertex as (5, 6). Note: Mark to be given only if coordinates are written in correct form.			0.5

CRQ 14

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Geometry
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
Learning Outcome	Uses the properties of chords to solve geometrical problems.		
Marks	2		
Item stem	Chord AB divides chord CD internally at the point P in the ratio 2 : 7. If AP = 5 cm, find the length of AB.		
Marking Scheme			
Expected Student's Response		Marks	
Draws a figure to interpret the given information (Not compulsory)			
Using the property of chords that $AP:PB = CP:PD$, arrives at the equation $\frac{5}{x} = \frac{2}{7}$			
Solves the equation to get $x = 17.5$		1	
Finds AB as $5 + 17.5 = 22.5$ cm		0.5	
		0.5	

CRQ 15

<i>Class</i>	10	<i>Subject</i>	Mathematics
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Mensuration
<i>Competency</i>	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
<i>Learning Outcome</i>	Uses formulas on areas and lengths related to circles to find unknown measurements.		
<i>Marks</i>	2		
<i>Item stem</i>	The minute hand of a wall clock sweeps an area of $18 \pi \text{ cm}^2$ with central angle 45° . Calculate the length of the minute hand.		
<i>Marking Scheme</i>			
<i>Expected Student's Response</i>			<i>Marks</i>
Plugs in values in the formula for area of sector, with $\theta = 45^\circ$			1
Simplifies and arrives at length of the minute hand = 12 cm			1

CRQ 16

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Geometry
Competency	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry C-7.4 Constructs different geometrical shapes like bisectors of line segments, angles and their bisectors, triangles, and other polygons, satisfying given constraints		
Learning Outcome	1. Uses distance formula to calculate the length of a line segment. 2. Divides a line segment in the given ratio.		
Marks	3		
Item stem	The coordinates of the end points of line segment PQ are (6, 0) and (0, 8). Taking the length of PQ in cm, divide PQ in the ratio 2 : 3.		
Marking Scheme			
Expected Student's Response			Marks
Substitutes the coordinates in distance formula as $\sqrt{6^2 + 8^2}$ to find PQ.			0.5
Obtains the length of PQ as 10 units.			0.5
Draws the line segment PQ of length 10 cm and draws a ray forming an acute angle at P (or Q).			0.5
Cuts off 5 points on the ray at equal distances, starting from P (or Q).			0.5
Makes use of corresponding angles or alternate angles property and constructs a parallel line from 2 nd point on the ray to cut PQ.			0.5
Identifies the point on PQ as the required point of division.			0.5

CRQ 17

<i>Class</i>	10	<i>Subject</i>	Mathematics
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Algebra
<i>Competency</i>	*		
<i>Learning Outcome</i>	Solves problems using the concepts of Arithmetic Progression		
<i>Marks</i>	3		
<i>Item stem</i>	The 3 rd term of an AP is 6 and its 6 th term is 21. Find the sum of the first 10 terms of the AP.		
<i>Marking Scheme</i>			
<i>Expected Student's Response</i>			<i>Marks</i>
Writing $a_3 = 6$ and $a_6 = 21$			0.5
and express them like $a + 2d = 6$ and $a + 5d = 21$			0.5
Solving for a and d from the two equations which gives $a = -4$ and $d = 5$			1
Finding S_{10} using the formula $S_{10} = \frac{10}{2}\{2(-4) + (10-1)5\} = 185$			1 (Correct substitution – 0.5, Correct calculation – 0.5)

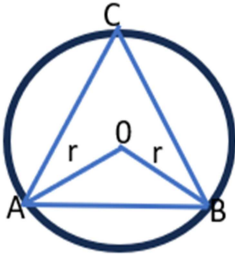
CRQ 18

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Algebra
Competency	C-3.2 Models and solves contextualised problems using equations (e.g., simultaneous linear equations in two variables or single polynomial equations) and draws conclusions about a situation being modelled		
Learning Outcome	Applies the concepts of linear relationships between two variables to a given a real-life situation		
Marks	3		
Item stem	Chhurbura and Nahaia went to Aizawl Lungdawh to attend the Carnival games sharing ₹280 together. The number of times Nahaia played the shooting games is double the number of times Chhurbura played the arcade games. If each arcade game cost ₹60 and each shot cost ₹40, find the number of games each of them played. Find out how much money was spent by each of them.		
Marking Scheme			
Expected Student's Response		Marks	
Taking the number of arcade games played by Chhurbura as x and the number of shooting games played by Nahaia as y, frames equations with given data $y = 2x$ ----- (i) $60x + 40y = 280$ ----- (ii)		1 [Award 0.5 mark if any 1 equation is framed correctly]	
Solves the equation (using any one algebraic method) to get $x = 2$ and $y = 4$		1	
Uses $x = 2$ and $y = 4$ in equation to get money spent on each game. Chhurbura : $2 \times 60 = ₹120/-$ Nahaia : $4 \times 40 = ₹160/-$		1	

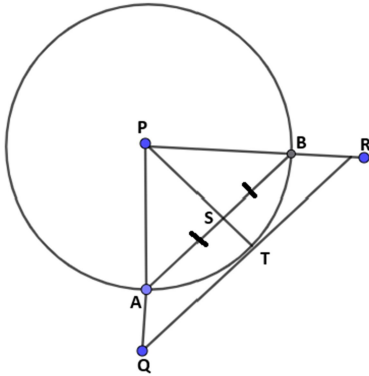
CRQ 19

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Geometry
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π .		
Learning Outcome	Applies theorems related to angles of a circle of to prove results		
Marks	3		
Item stem	A chord subtends an angle of 30° on the circle. Show that the chord is of the same length as the radius of the circle.		

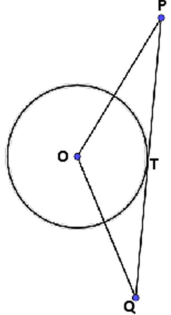
Marking Scheme

Expected Student's Response	Marks
<p>Draws a figure to represent the given information.</p>  <p>Sample figure:</p>	0.5
Uses the relation between subtended angle and central angle and arrives at central angle of chord $AB = 60^\circ$	1
Makes use of radii of a circle to show $\triangle AOB$ is isosceles and thus arrives at $\angle OAB = \angle OBA$	0.5
In $\triangle AOB$, applies angle sum property and finds $\angle OBA = 60^\circ$	0.5
Justifies all angles of $\triangle AOB = 60^\circ$, it is an equilateral triangle. Hence $AB = OA = OB \Rightarrow AB = r$	0.5

CRQ 20

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Geometry
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π .		
Learning Outcome	Proves results/riders based on similarity of triangles. Proves results related to tangents to a circle to solve problems.		
Marks	3		
Item stem	<p>In the given figure, QR is tangent at T to a circle with P as centre and PT bisects chord AB at S. Show that ΔPAB and ΔPQR are similar.</p> 		
Marking Scheme			
Expected Student's Response			Marks
Uses relation between radius and tangent to get $PT \perp QR$ --- (i)			0.5
Uses radius – chord property and arrives at $PT \perp AB$ --- (ii)			0.5
From (i) and (ii) arrives at $AB \parallel QR$			0.5
Shows corresponding angles equal.			0.5
Shows ΔPAB and ΔPQR are similar by AA similarity			1

CRQ 21

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Geometry
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π .		
Learning Outcome	Uses tangent theorems and properties of triangles to find unknown values.		
Marks	3		
Item stem	<p>In the given figure, PQ is tangent at T to a circle of 3cm. P and Q are both 5cm away from the centre. QOP.</p>  <p>centre O and radius Find the area of Δ QOP.</p>		

Marking Scheme

Expected Student's Response	Marks
Joins OT and using the property of tangent, arrives at $OT \perp PQ$.	0.5
Applies Pythagoras theorem in ΔTOP and ΔTOQ to get $QT = PT = 4$ cm. [Note: showing one value is sufficient.]	0.5
Using the property of isosceles triangle POQ, arrives at $PQ = 8$ cm	1
Finds the area of a right $\Delta QOP = \frac{1}{2} \times OT \times QP = \frac{1}{2} \times 3 \times 8 = 12 \text{ cm}^2$	1

CRQ 22

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Algebra
Competency	*		
Learning Outcome	Finds unknown values using the formulas related to Arithmetic Progressions.		
Marks	3		
Item stem	Sum of nine consecutive even numbers is 270. Find the first and last term of the sequence.		

Marking Scheme

Expected Student's Response	Marks
Identifies common difference $d = 2$	0.5
Applies sum to n terms to get $\frac{9}{2} [2a + 8 \times 2] = 270$	0.5
Simplifies to get $a = 22$	1
Finds last term $t_9 = 22 + 8 \times 2 = 38$	1

CRQ 23

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects		
Learning Outcome	Solves problems on surface area and volume of solids.		
Marks	3		
Item stem	12 cubes of same size are arranged to form a cuboid with 4 cubes at the base. If the base area of the cuboid so formed is $16x^2$ square units, find the volume of the cuboid.		
Marking Scheme			
Expected Student's Response			Marks
Using the given information, finds the length of one side of a cube as 2x units.			1
Finds the dimensions of the cuboid as 4x units, 4x units and 6x units.			1
Calculates the volume of the cuboid as $96x^3$ cubic units.			1

CRQ 24

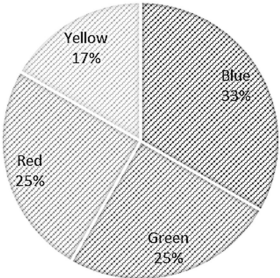
<i>Class</i>	10	<i>Subject</i>	Mathematics
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Arithmetic
<i>Competency</i>	*		
<i>Learning Outcome</i>	Uses the concept of time and work to solve problems in real life scenarios.		
<i>Marks</i>	3		
<i>Item stem</i>	A can do a piece of work in 20 days. He started the work and then after 4 days, B joined him and together they complete the work in 6 days. How long does B alone take to do the piece of work.		
<i>Marking Scheme</i>			
<i>Expected Student's Response</i>			<i>Marks</i>
From given condition finds A's 4 days' work = 1/5			0.5
For arriving at remaining work = 1 - 1/5 = 4/5			0.5
For considering time taken by B to complete work as x and arriving at equation for (A+B)'s work in 1 day = $\frac{1}{20} + \frac{1}{x} = \frac{x+20}{20x}$			1
Solving the equation to get number of days taken by B to complete the work alone x = 12 days			1

CRQ 25

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Arithmetic
Competency	*		
Learning Outcome	Solves problems using the concepts related to speed.		
Marks	3		
Item stem	Lyn starts from her house to her office on scooter daily at 8 a.m. If she covers the distance at 20km/h, she is late by 2 minutes. However, if she covers this distance at 30km/h, she is early by 8 minutes. What is the distance between her home and office?		
Marking Scheme			
Expected Student's Response			Marks
Considers 'x' as distance to be covered and arrives at time taken in two conditions. Time taken at 20 km/h = x/20 hr Time taken at 30 km/h = x/30 hr			0.5
Considering 't' as the time to reach and uses the given conditions and arrives at the equations $\frac{x}{20} = t + \frac{2}{60}$ $\frac{x}{30} = t - \frac{8}{60}$			0.5 0.5
Arrives at $\frac{x}{20} - \frac{x}{30} = \frac{2}{60} - \frac{8}{60}$			0.5
Simplifies the above equation to get distance as 10 km			1

CRQ 26


<i>Class</i>	10	<i>Subject</i>	Mathematics										
<i>Cognitive level</i>	Remember	<i>Content Domain</i>	Statistics										
<i>Competency</i>	C-8.1 Models daily-life phenomena and uses representations such as graphs, tables, and equations to draw conclusions												
<i>Learning Outcome</i>	Represents the given data in the form of a pie chart												
<i>Marks</i>	3												
<i>Item stem</i>	The table shows the colours preferred by a group of people.												
	<table><tr><td>Colours</td><td>No. of people</td></tr><tr><td>Blue</td><td>40</td></tr><tr><td>Green</td><td>30</td></tr><tr><td>Red</td><td>30</td></tr><tr><td>Yellow</td><td>20</td></tr></table>			Colours	No. of people	Blue	40	Green	30	Red	30	Yellow	20
	Colours	No. of people											
	Blue	40											
	Green	30											
	Red	30											
	Yellow	20											
Draw a pie chart showing the above data.													
<i>Marking Scheme</i>													

<i>Expected Student's Response</i>	<i>Marks</i>										
Finding total frequency as 120.	0.5										
Finding the central angles <table border="1"> <thead> <tr> <th>Colour</th><th>Central Angle</th></tr> </thead> <tbody> <tr> <td>Blue</td><td>120^0</td></tr> <tr> <td>Green</td><td>90^0</td></tr> <tr> <td>Red</td><td>90^0</td></tr> <tr> <td>Yellow</td><td>60^0</td></tr> </tbody> </table>	Colour	Central Angle	Blue	120^0	Green	90^0	Red	90^0	Yellow	60^0	1
Colour	Central Angle										
Blue	120^0										
Green	90^0										
Red	90^0										
Yellow	60^0										
Represents the data in the form of a pie chart. Sample pie chart: <div> <p>PREFERENCE OF COLOURS</p>  </div>	1.5 [Note: Award 0.5 if only one part is correctly shown. Award 1 mark if any two parts are correctly shown.]										

CRQ 27

<i>Class</i>	10	<i>Subject</i>	Mathematics
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Coordinate Geometry
<i>Competency</i>	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry		
<i>Learning Outcome</i>	Proves results using the concepts of distance formula and section formula.		
<i>Marks</i>	3		
<i>Item stem</i>	In ΔABC, the length of the median through A(x, y) is 5 units. If two vertices of a triangle are B(1,-1) and C(-1,3), show that the relation between x and y is $x^2 + y^2 - 2y = 24$.		
<i>Marking Scheme</i>			
<i>Expected Student's Response</i>			<i>Marks</i>
Finds the midpoint of BC as (0, 1)			1
Using distance formula for finding the length of the median, arrives at the equation $(x-0)^2 + (y-1)^2 = 5^2$			1
Simplifies the equation to get $x^2 + y^2 - 2y = 24$			1

CRQ 28

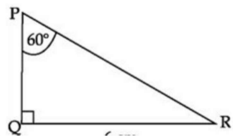
Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Solves problems on surface area and volume formulas in real world situations		
Marks	3		
Item stem	<p>A bucket, as shown in the figure, has a bottom radius of 7 cm. Its top radius is twice the bottom radius, and its height is three times the bottom radius. How many times must the bucket be filled and emptied to remove 150 litres of water from a tank?</p> 		

Marking Scheme

Expected Student's Response	Marks
<p>Uses the given information to find the top radius and height: $r_1 = 7 \text{ cm}, r_2 = 2 \times 7 \text{ cm}, h = 3 \times 7 = 21 \text{ cm}$ Note: Any appropriate notations used could be considered.</p>	1
<p>Writes volume of frustum of cone from figure as $\frac{1}{3}\pi(21)[(7)^2 + (14)^2 + (7 \times 14)]$ cubic units Note: Should not deduct marks if the formula is not written. 0.5 mark is to be given for correct substitution in the correct formula.</p>	0.5
Calculates volume of bucket as 7546 cm^3	0.5
<p>Convert cm^3 into litre [$1 \text{ litre} = 1000 \text{ cm}^3$] and finds the required bucket be filled and emptied to remove 150 litres of water from a tank. Gets number of buckets required to empty a tank containing 150 litres of water as approximately 19.88 or 20 buckets (approx.)</p>	0.5

CRQ 29

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Trigonometry
Competency	C-4.6 Understands the definitions of the basic trigonometric functions, their history and motivation (including the introduction of the sin and cos functions by Aryabhata using chords), and their utility across the sciences		
Learning Outcome	Uses trigonometric ratios to solve problems related to triangles		
Marks	3		
Item stem	<p>ΔPQR is right angled at Q and the measure of $\angle P$ is twice the measure of $\angle R$. Is the length of the side opposite to $\angle P$ is twice the length of side opposite to $\angle R$? Justify your answer.</p>		


Marking Scheme	
Expected Student's Response	Marks
Uses angle sum property in ΔPQR to arrive at $\angle P = 60^\circ$ and $\angle Q = 30^\circ$. (Award 0.5 if any one angle is correctly obtained)	0.5
Uses either tan or cot ratio to arrive at the ratio of hypotenuse sides of ΔPQR . $\tan P = \frac{QR}{PQ}$ or $\tan R = \frac{PQ}{QR}$  non-	1
Arrives at $QR = \sqrt{3}PQ$ and concludes length of the side opposite to $\angle P$ is not twice the length of side opposite to $\angle R$	0.5

CRQ 30

<i>Class</i>	10	<i>Subject</i>	Mathematics			
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Statistics			
<i>Competency</i>	C-6.1 Applies measures of central tendencies such as mean, median and mode					
<i>Learning Outcome</i>	Computes mean in real life context					
<i>Marks</i>	3					
<i>Item stem</i>	The table below shows the frequency distribution of different age groups of people who joined a trip to Reiek. The mean of the above frequency distribution is 35. How many people are between the age group 40-50 years?					
	Age (in years)	10-20	20-30	30-40	40-50	50-60
	Number of people	2	4	7	y	1

Marking Scheme	
Expected Student's Response	Marks
Finds the correct class marks as 15, 25, 35, 45, 55	0.5
Calculating $f_i x_i$ for each i 30, 100, 245, 45y, 55	0.5
Gets $\Sigma f_i = 14 + y$, $\Sigma f_i x_i = 430 + 45y$	0.5
Note: The above three steps can be covered in the form of a table also. Award the marks accordingly.	
Applies the formula of mean and write the relation $\frac{430+45y}{14+y} = 35$	0.5
Simplifies the above equation and finds $y = 6$	1

CRQ 31

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Solves problems on surface area and volume formulas in real world situations.		
Marks	3		
Item stem	<p>To make a cylindrical socket block toy as shown below, a wooden piece in the shape of a cuboid with dimensions 50 cm, 10 cm, and 10 cm is taken. Five cylindrical shapes, each with a diameter of 8 cm and a height of 7 cm, are carved out from the wooden piece. If the density of the wood used is 0.4 g/cm^3, find the mass of the remaining wood. (Use Density = Mass/Volume)</p> 		

Marking Scheme

Expected Student's Response	Marks
Calculates Volume of the cuboid as 5000 cm^3	0.5
Calculates the volume of the five cylinders carved out as $5\pi(4^2)7 = 1760 \text{ cm}^3$	1
Calculates the volume of the remaining wood after carving out cylinders as $5000 - 1760 = 3240 \text{ cm}^3$	0.5
Arrives at the mass of the remaining wood as $0.4 \text{ g/cm}^3 \times 3240 = 1296 \text{ g} = 1.296 \text{ kg}$	1
Alternative Method	
Calculates the volume of the remaining wood after carving out cylinders = Vol of cuboid - Vol five cylinders = $50 \times 10 \times 10 - 5\pi(4^2)7 = 5000 - 1760 = 3240 \text{ cm}^3$	2 Award 1 mark for correct substitution of values in the correct formula and 1 mark for calculation.
Arrives at the mass of the remaining wood as $0.4 \text{ g/cm}^3 \times 3240 = 1296 \text{ g} = 1.296 \text{ kg}$	1

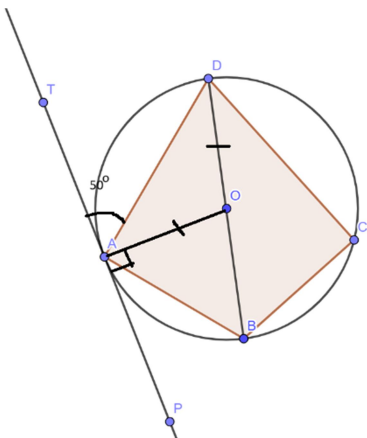
CRQ 32

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Coordinate geometry
Competency	C-4.5 Specifies locations and describes spatial relationships using coordinate geometry		
Learning Outcome	Solves mathematical problems using the condition for collinearity of points.		
Marks	3		
Item stem	Find a point on the line $3x + y = 4$ which is collinear with the points $(-2, 2)$ and $(-3, 1)$.		

<i>Marking Scheme</i>	
<i>Expected Student's Response</i>	<i>Marks</i>
Takes the point on the given line as (a, b) and writes the equation $3a + b = 4$ ----- (i)	0.5
Using the condition for collinearity of three points, arrives at the equation $a(2 - 1) + (-2)(1 - b) + (-3)(b - 2) = 0$	1
Simplifies the equation to get $a - b + 4 = 0$ ----- (ii)	0.5
Solves the equations (i) and (ii) by any one suitable method to get $a = 0$ and $b = 4$.	0.5
Writes the required point as (0, 4).	0.5

CRQ 33

<i>Class</i>	10	<i>Subject</i>	Mathematics
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Geometry
<i>Competency</i>	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
<i>Learning Outcome</i>	Uses the properties of tangents to find unknown values.		
<i>Marks</i>	3		
<i>Item stem</i>	ABCD is a cyclic quadrilateral, and BD is the diameter of the circle. PT is the tangent at A such that $\angle DAT = 50^\circ$. Represent the given information in the form of a diagram and find the value of $\angle ADB$.		

<i>Marking Scheme</i>	
<i>Expected Student's Response</i>	<i>Marks</i>
<p>Draws the figure with the necessary information and joins OA. Sample figure:</p> 	1
Using the property of tangents, finds $\angle OAD = 40^\circ$.	1 (deduct 0.5 marks if the reason is not stated)
From the isosceles triangle AOD, finds that $\angle ADO = 40^\circ$ and concludes that $\angle ADB = 40^\circ$.	1 (deduct 0.5 if reasoning is not given)

CRQ 34

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Algebra
Competency	*		
Learning Outcome	Solves real life / mathematical problem using the concepts of arithmetic progression.		
Marks	3		
Item stem	Does a hexagon with interior angles in an arithmetic progression exist if the difference between the greatest and smallest angle is 100° ? If it exists, will it be concave or convex? Justify your answer.		
Marking Scheme			
Expected Student's Response			Marks
Method 1			
Takes the smallest angle as a and the remaining angles in AP as $a + d, a + 2d, a + 3d, a + 4d, a + 5d$ (Award $\frac{1}{2}$ mark representing the same in any other notation)			0.5
Arrives at $6a + 15d = 720^\circ$ ----- (i) using the sum of angles in a hexagon.			0.5
Arrives at $a + 5d - a = 100^\circ$ and finds $d = 20^\circ$.			0.5
Arrives at $a = 70^\circ$ by using the value of d in (i). Lists all the angles as $70^\circ, 90^\circ, 110^\circ, 130^\circ, 150^\circ, 170^\circ$.			1
Justifies that stating all the interior angles are less than 180° , so hexagon is convex. OR Writes that the measure of the smallest angle ($a = 70^\circ$) and the greatest angle ($a + 5d = 170^\circ$) are less than 180° , so the hexagon is convex.			0.5
Method 2			
Takes the angles as $a - 5d, a - 3d, a - d, a + d, a + 3d$ and $a + 5d$, which are in AP with common difference $2d$.			0.5
Frames the equation $6a = 720^\circ$ using the sum of angles in a hexagon.			0.5
Gets the value of 'a' as 120.			0.5
Forms the equation $a + 5d - (a - 5d) = 100^\circ$ from the given information and gets $d = 10$.			0.5
Finds that the angles are $70^\circ, 90^\circ, 110^\circ, 130^\circ, 150^\circ, 170^\circ$.			0.5
Justifies that stating all the interior angles are less than 180° , so hexagon is convex. OR Writes that the measure of the smallest angle (70°) and the greatest angle (170°) are less than 180° , so the hexagon is convex.			0.5

CRQ 35

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Algebra
Competency	*		
Learning Outcome	Uses the concepts related to arithmetic progression to solve problems.		
Marks	3		
Item stem	Kimi starts counting backwards from 54, skipping 3 at a time. How many numbers should she count so that the sum of the numbers will be 513?		
Marking Scheme			
Expected Student's Response			Marks
Identifies the AP 54, 51, 48, ... and writes $a = 54, d = -3$			0.5
Takes the sum as 513 and arrives at the equation $\frac{n}{2} [2 \times 54 + (-3)(n - 1)] = 513$			1
Solves the equation to get $n = 18$ or 19			1
Explains the double answer, saying that the 19 th term would be zero. $a_{19} = 54 + 18 \times (-3) = 54 - 54 = 0$			0.5


CRQ 36

Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Algebra
Competency	C-3.2 Models and solves contextualised problems using equations (e.g., simultaneous linear equations in two variables or single polynomial equations) and draws conclusions about a situation being modelled		
Learning Outcome	Analyses a given context using the concepts of quadratic equations		
Marks	3		
Item stem	Lucy was solving a quadratic equation $\sqrt{3}x^2 - 2x - 8\sqrt{3} = 0$. Her steps are given below: $\sqrt{3}x^2 + x - 3x - 8\sqrt{3} = 0$ $\sqrt{3}x (x - 1) - \sqrt{3}(\sqrt{3}x - 8) = 0$ She could not continue further. Lucy wants to solve this only using factorisation. Identify the mistake and solve the equation correctly.		
Marking Scheme			
Expected Student's Response			Marks
Writes that the mistake happened while splitting the middle term.			0.5
Solves the equation as follows: $\sqrt{3}x^2 - 6x + 4x - 8\sqrt{3} = 0$ $\sqrt{3}x (x - 2\sqrt{3}) + 4(x - 2\sqrt{3}) = 0$ $(x - 2\sqrt{3})(\sqrt{3}x + 4) = 0$ $(x - 2\sqrt{3}) = 0$ or $(\sqrt{3}x + 4) = 0$			0.5 0.5 0.5 0.5
Writes the roots as $x = 2\sqrt{3}$ or $x = \frac{-4}{\sqrt{3}}$			0.5

CRQ 37

<i>Class</i>	10	<i>Subject</i>	Mathematics
<i>Cognitive level</i>	Remember	<i>Content Domain</i>	Algebra
<i>Competency</i>	*		
<i>Learning Outcome</i>	Finds HCF and LCM of algebraic expressions		
<i>Marks</i>	3		
<i>Item stem</i>	Find the HCF and LCM of the expressions $2x^3 - 128$, $x^2 - 9x + 20$ and $4x^2 - 64$.		
<i>Marking Scheme</i>			
<i>Expected Student's Response</i>			<i>Marks</i>
Factorises the given expressions to get $2x^3 - 128 = 2(x - 4)(x^2 + 4x + 16)$ $x^2 - 9x + 20 = (x - 4)(x - 5)$ $x^2 - 16 = 4(x - 4)(x + 4)$			1.5 [0.5 for factorising each expression]
Writes HCF as $(x - 4)$			0.5
Writes LCM as $4(x - 4)(x + 4)(x - 5)(x^2 + 4x + 16)$			1

CRQ 38

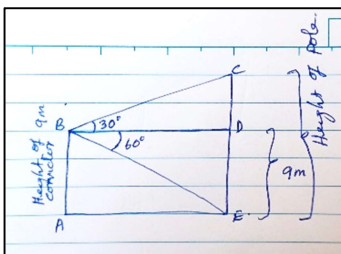
Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Mensuration
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)		
Learning Outcome	Solves problems based on surface area and volume of different shapes and their combinations.		
Marks	5		
Item stem	A platform of dimensions $20\text{ m} \times 15\text{ m} \times 2\text{ m}$ is constructed above a cylindrical pillar of radius 6 m and height 14 m. The cost of concreting is ₹1800 per cubic metre. The structure is painted at the rate of ₹ 300 per 10 m^3 . What is the amount spent in constructing and painting the structure?		
Marking Scheme			
Expected Student's Response			Marks
<p>Visualises the structure as</p> <div></div>			
Note: Drawing the figure is not compulsory. May list out the given measurements also.			

Using the formula to find the volume of cylinder, obtains $\frac{22}{7} \times 6 \times 6 \times 14$	0.5
Calculates the volume of cylindrical part as 3168 m^3	0.5
Finds the volume of the cuboidal part as 600 m^3	0.5
Obtains the volume of the structure as 3768 m^3	0.5
Calculates the cost of concrete used in making the structure as $3768 \times ₹1800$ to get ₹ 6,778,400.	0.5
Identifies the surface to be painted as CSA(cylinder) + TSA(cuboid)-area(top circular face)	0.5
Finds the surface area to be painted as $2 \times \frac{22}{7} \times 6 \times 14 + 2(20 \times 15 + 15 \times 2 + 20 \times 2) - \frac{22}{7} \times 6 \times 6$	0.5
Calculates the area to be painted as 1682.86 m^2	0.5
Finds the cost of painting as $1682.86 \times ₹300 = ₹ 504858$	0.5
Obtains the total cost as ₹ 7283258	0.5

CRQ 39

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Trigonometry
Competency	C-4.6 Understands the definitions of the basic trigonometric functions, their history and motivation, and their utility across the sciences.		
Learning Outcome	Finds the height/depth or length of an object or the distance between two distant objects using trigonometric ratios.		
Marks	5		
Item stem	<p>From a 9 m high corridor of his house in Chaltlang, Thara found the electric pole standing on the roadside. He found the angle of elevation to the top of the pole as 30° and the angle of depression to the foot of the pole to be 60°. Represent the given information in a diagram and using it, determine the height of the pole and also find the distance between the pole and the corridor where he is standing.</p> <p>(Use $\sqrt{3} = 1.732$)</p>		

Marking Scheme

Expected Student's Response	Marks
Drawing the figure and labelling correctly 	1
For considering $\text{rt}\triangle BDE$, and arriving at $\sqrt{3} = \frac{9}{BD}$	1
Simplifying to get BD (distance between the building and electric pole) = $3\sqrt{3} \text{ m} = 3 \times 1.732 = 5.196 \text{ m}$	1

For considering $\text{rt}\triangle BDC$, $\frac{1}{\sqrt{3}} = \frac{CD}{3\sqrt{3}}$	1
Simplifying to get $CD = 3 \text{ m}$	0.5
Arriving at height of the pole = $BD + CD = 3+9 = 12 \text{ m}$	0.5

CRQ 40

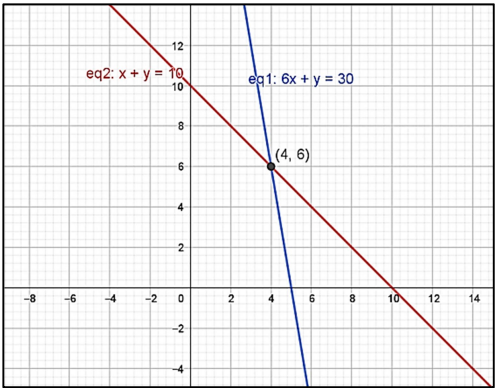
Class	10	Subject	Mathematics
Cognitive level	Analyse	Content Domain	Algebra
Competency	*		
Learning Outcome	Finds unknown values using the concepts related to Arithmetic Progressions.		
Marks	5		
Item stem	Children were collecting firewood to be used in Zawlbuk. The firewood was stacked at the entrance in the following manner: 30 pieces of firewood in the bottom row, 28 in the next row, and 26 in the row next to it and so on. How much firewood did the children collect if they could stack six such rows and how many pieces would be at the top row? If each child collects two more pieces of firewood, how many rows will be there in the stack?		
Marking Scheme			
Expected Student's Response			Marks
Recognises the AP: 30, 28, 26, ... and identifies			0.5
a = 30, d = 28 – 30 = -2, n = 6			0.5
Note: Give only 0.5 if a or d is wrong			
Uses sum to n terms formula to find sum to the 6 th term			
$S_6 = \frac{6}{2}\{2 \times 30 + (5)(-2)\}$			0.5
Simplifies to get the number of firewood collected as 150.			0.5
Finds the 6 th term using nth term formula			
$a_6 = 30 + 5(-2)$			0.5
Simplifies to get 20 firewood be at the top row.			0.5
Finds number of children = $\frac{150}{10} = 15$			0.5
Using the information on extra pieces of firewood, identifies that 30 more pieces of firewood will be there.			0.5
Writes that these 30 pieces of firewood can be stacked either by adding five more in each of the six rows or two more rows can be added to the stack with 18 and 14 pieces of firewood respectively. In this case, there will be 7 complete rows and 8 th row being incomplete.			1 (Any one possibility would be sufficient)

CRQ 41

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Algebra
Competency	C-3.2 Models and solves contextualised problems using equations (e.g., simultaneous linear equations in two variables or single polynomial equations) and draws conclusions about a situation being modelled.		
Learning Outcome	Solves quadratic equations based on mathematical and/or real-life contexts.		
Marks	5		
Item stem	Cars A and B start off from a road junction. They travel along perpendicular roads. After some time, the distance covered by car A is 3 km more than the distance covered by car B and the distance between the cars then is 3 less than twice the distance covered by car B. Find the distance between the cars at that time.		
Marking Scheme			
Expected Student's Response			Marks
With given data writes expressions, Distance travelled by car B as x and car A as $x + 3$.			0.5
Identifies distance between the car as $2x - 3$.			0.5
Frames quadratic equation using Pythagoras theorem, $x^2 + (x + 3)^2 = (2x - 3)^2$			1
Simplifies the equation to get $2x^2 - 18x = 0$			0.5
Factorises to get $x = 9$ and $x = 0$			1
Recognises $x = 0$ is not possible in the given context.			0.5
Uses $x = 9$ in $2x - 3$ to find distance as 15 km			1

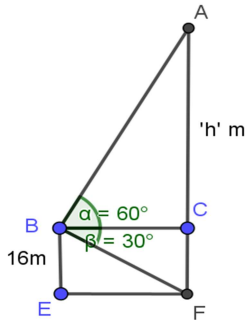
CRQ 42

Class	10	Subject	Mathematics
Cognitive level	Evaluate	Content Domain	Algebra
Competency	C-8.1 Models daily-life phenomena and uses representations such as graphs, tables, and equations to draw conclusions		
Learning Outcome	Solves a real life related problem using the concepts related to pair of linear equations in two variables graphically.		
Marks	5		
Item stem	The cost of one Table Tennis bat is ₹600 and the cost of one Table Tennis ball is ₹100. The school Table tennis team spends ₹3000 and buys 10 items. Find the number of bats and balls bought using graphs. Will the graph remain unchanged if the number of bats and balls get interchanged, but the amount spent remains the same for 10 items bought? Explain.		

Marking Scheme	
Expected Student's Response	Marks
Taking the number of Table Tennis bats bought as x and number of Table Tennis balls bought as y , forms the equations $x + y = 10$ ----- (i) and $600x + 100y = 3000 \Rightarrow 6x + y = 30$ ----- (ii)	0.5 0.5
Determines the points to be plotted for the two equations in some form.	1
Plots graph of equations  (i) and (ii)	1 (0.5 for each line)
Marks solution as $(4, 6)$ that is $x = 4, y = 6$	0.5
Interprets as four bats and six balls purchased.	0.5
Explains that the graph will not remain the same if the number of bats and balls get interchanged, as the equation (ii) will change to $x + 6y = 30$.	1

CRQ 43

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Trigonometry
Competency	C-4.6 Understands the definitions of the basic trigonometric functions, their history and motivation (including the introduction of the sin and cos functions by Aryabhata using chords), and their utility across the sciences		
Learning Outcome	Finds the height/depth or length of an object or the distance between two distant objects using trigonometric ratios		
Marks	5		
Item stem	<p>A person standing on a watch tower, 16 m above water level, observes angles of elevation and depression respectively of the top and bottom of a nearby light house are 60° and 30°, respectively. Draw a figure to represent the information given and use it to calculate</p> <ol style="list-style-type: none"> the distance between the lighthouse and the watch tower the height of the lighthouse 		

Marking Scheme	
Expected Student's Response	Marks
<p>Draws appropriate figure to depict the given information</p> <p>Sample figure:</p> 	1
<p>Calculates the distance between the lighthouse and the watch tower using tan or cot ratio in $\triangle BCF$ resulting in</p> $\tan 30^\circ = \frac{16}{BC} = \frac{1}{\sqrt{3}}$	1
<p>Arrives at $BC = 16\sqrt{3}m$</p> <p>Concludes the distance between the lighthouse and the watch tower is $16\sqrt{3}m$</p>	1
<p>Calculates AC that is h in $\triangle ABC$ using tan or cot ratio</p> $\tan 60^\circ = \frac{h}{16\sqrt{3}} = \sqrt{3} \text{ which gives } h = 48 m$	1
<p>Concludes the height of light house as $48 m + 16 m = 64 m$</p>	1

CRQ 44

<i>Class</i>	10	<i>Subject</i>	Mathematics			
<i>Cognitive level</i>	Evaluate	<i>Content Domain</i>	Statistics			
<i>Competency</i>	C-6.1 Applies measures of central tendencies such as mean, median, and mode					
<i>Learning Outcome</i>	Interprets a data using measures of central tendency					
<i>Marks</i>	5					
<i>Item stem</i>	The performances of two classes in a test are given below. Which measure of central tendency will be the most appropriate to compare their performances? Using the measure of your choice, determine which class performed better in the test.					
	Marks	0-10	10-20	20-30	30-40	40-50
	Section A	2	4	15	8	1
	Section B	2	3	16	8	2

Marking Scheme	
Expected Student's Response	Marks
Writes that the most appropriate measure of central tendency for this situation is mean, as it is depended on all scores and hence is a more stable measure.	1

Draws the table for calculation						2 [0.5 for x values 0.5 for any one correct fx column 0.5 for any one correct sum of frequencies 0.5 for any one correct sum of fx]
Marks	Mid-value	Section A		Section B		
	x	f	fx	f	fx	
0-10	5	2	10	2	10	
10-20	15	4	60	3	45	
20-30	25	15	375	16	400	
30-40	35	8	270	8	270	
40-50	45	1	45	2	90	
Total		30	760	31	815	
Note: Equivalent marks to be allotted if any other method is followed.						
Calculates mean for section A as $\frac{760}{30} = 25.33$						0.5
Calculates mean for section B as $\frac{815}{31} = 26.29$						0.5
Concludes that section B has performed better as the mean of the scores is greater for section B.						1

CRQ 45

Class	10	Subject	Mathematics
Cognitive level	Apply	Content Domain	Trigonometry
Competency	C-4.6 Understands the definitions of the basic trigonometric functions, their history and motivation (including the introduction of the sin and cos functions by Aryabhata using chords), and their utility across the sciences		
Learning Outcome	Solves problems related to real life scenarios using trigonometry		
Marks	5		
Item stem	A kite was flying at some distance above the ground. At a point of time, two children viewed the kite at an angle of 60° and 30° respectively. If the children were standing on the ground in opposite directions of the kite, 300 m apart, at what height was the kite flying? Use an appropriate diagram to support your answer. (Take $\sqrt{3} = 1.732$)		

Marking Scheme

Expected Student's Response	Marks
<p>Draws the figure with given details.</p> <p>Sample figure:</p> <p>Here, A and B are the positions of children and K is the position of the kite. The height of the kite from the ground taken as 'h' and the distance the children are divided as x and</p> <div style="text-align: center;"> </div> <p>the kite. The (GK) is between 300-x.</p> <p>Note: the distance x and 300-x may be interchanged as well.</p>	1

From $\triangle AGK$, finds $\tan 60 = \frac{h}{x} = \sqrt{3}$ ----- (i)	0.5
From $\triangle BGK$, finds $\tan 30 = \frac{h}{300-x} = \frac{1}{\sqrt{3}}$ ----- (ii)	0.5
From (i), arrives at $x = \frac{h}{\sqrt{3}}$ and from (ii), arrives at $x = 300 - h\sqrt{3}$ Note: As per the figure, the equations might vary. Award marks accordingly.	1 (0.5 for each)
Solves the two equations by eliminating x to get $h = 75\sqrt{3}$	1
Calculates the height of the kite as $75 \times 1.732 = 129.9$ m	1

CRQ 46

Class	10	Subject	Mathematics				
Cognitive level	Evaluate	Content Domain	Geometry				
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π						
Learning Outcome	Validates statements / proofs with mathematical argumentation on areas and lengths related to circles						
Marks	2						
Item stem	A maths teacher in grade 10 claims that if arcs AB and PQ of equal length subtending central angles respectively 30° and 45° then the ratio of the radii of the two circles corresponding to arcs AB and PQ must be 1:1. Students Eoma and Sangi respond to this claim as given below:						
	<table><tr><th>Eoma</th><th>Sangi</th></tr><tr><td>Let us call radius corresponding to arcs AB and PQ as r_1 and r_2 respectively. Claim made is wrong that is we will show $r_1:r_2 \neq 1:1$. Given arc length AB = arc length of PQ So, $\frac{30^\circ}{360^\circ}(2\pi r_1) = \frac{45^\circ}{360^\circ}(2\pi r_2)$ On simplification gives us that $\frac{r_1}{r_2} = \frac{3}{2}$. Hence, we can conclude that ratio of the radii of the two circles is not 1:1.</td><td>Let us call radius corresponding to arcs AB and PQ as r_1 and r_2 respectively and angles corresponding to arcs as θ_1 and θ_2 respectively. Claim made is wrong; we will prove $r_1:r_2 \neq 1:1$ that is $r_1 \neq r_2$. On contrary, suppose that the ratio of the radii is 1:1, hence we have $r_1 = r_2 \text{ -----(1)}$ Also given that arc length of AB = arc length of PQ, results in $\frac{\theta_1}{360^\circ}(2\pi r_1) = \frac{\theta_2}{360^\circ}(2\pi r_2) \text{ -----(2)}$ (1) and (2) results in $\theta_1 = \theta_2$ But angles subtended are 30° and 45° which are not equal, a contradiction. Hence our assumption $r_1:r_2 = 1:1$ is wrong.</td></tr></table>			Eoma	Sangi	Let us call radius corresponding to arcs AB and PQ as r_1 and r_2 respectively. Claim made is wrong that is we will show $r_1:r_2 \neq 1:1$. Given arc length AB = arc length of PQ So, $\frac{30^\circ}{360^\circ}(2\pi r_1) = \frac{45^\circ}{360^\circ}(2\pi r_2)$ On simplification gives us that $\frac{r_1}{r_2} = \frac{3}{2}$. Hence, we can conclude that ratio of the radii of the two circles is not 1:1.	Let us call radius corresponding to arcs AB and PQ as r_1 and r_2 respectively and angles corresponding to arcs as θ_1 and θ_2 respectively. Claim made is wrong; we will prove $r_1:r_2 \neq 1:1$ that is $r_1 \neq r_2$. On contrary, suppose that the ratio of the radii is 1:1, hence we have $r_1 = r_2 \text{ -----(1)}$ Also given that arc length of AB = arc length of PQ, results in $\frac{\theta_1}{360^\circ}(2\pi r_1) = \frac{\theta_2}{360^\circ}(2\pi r_2) \text{ -----(2)}$ (1) and (2) results in $\theta_1 = \theta_2$ But angles subtended are 30° and 45° which are not equal, a contradiction. Hence our assumption $r_1:r_2 = 1:1$ is wrong.
	Eoma	Sangi					
Let us call radius corresponding to arcs AB and PQ as r_1 and r_2 respectively. Claim made is wrong that is we will show $r_1:r_2 \neq 1:1$. Given arc length AB = arc length of PQ So, $\frac{30^\circ}{360^\circ}(2\pi r_1) = \frac{45^\circ}{360^\circ}(2\pi r_2)$ On simplification gives us that $\frac{r_1}{r_2} = \frac{3}{2}$. Hence, we can conclude that ratio of the radii of the two circles is not 1:1.	Let us call radius corresponding to arcs AB and PQ as r_1 and r_2 respectively and angles corresponding to arcs as θ_1 and θ_2 respectively. Claim made is wrong; we will prove $r_1:r_2 \neq 1:1$ that is $r_1 \neq r_2$. On contrary, suppose that the ratio of the radii is 1:1, hence we have $r_1 = r_2 \text{ -----(1)}$ Also given that arc length of AB = arc length of PQ, results in $\frac{\theta_1}{360^\circ}(2\pi r_1) = \frac{\theta_2}{360^\circ}(2\pi r_2) \text{ -----(2)}$ (1) and (2) results in $\theta_1 = \theta_2$ But angles subtended are 30° and 45° which are not equal, a contradiction. Hence our assumption $r_1:r_2 = 1:1$ is wrong.						
Whose argument do you agree with and why?							

<i>Marking Scheme</i>	
<i>Expected Student's Response</i>	<i>Marks</i>
Agrees upon arguments made by both Eoma and Sangi. Note: <i>If student agrees upon only one statement, then award only 0.5 mark</i>	1
Provides some evidence of understanding of the proof by Eoma. [For example, mentions the use of arc length formula to show ratio to be different.]	0.5
Provides evidence of understanding of the proof by Sangi. [For example, mentions the counter argument using arc length formula, relating to central angle measure, thus showing the claim wrong.]	0.5

CRQ 47

Class	10	Subject	Mathematics
Cognitive level	Evaluate	Content Domain	Mensuration
Competency	C-4.3 Proves theorems about the geometry of a circle, including its chords, subtended angles, inscribed polygons, and area in terms of π		
Learning Outcome	Makes decisions using concepts related to sector of a circle		
Marks	3		
Item stem	<p>Consider a sector of central angle 90° in a unit circle. Scenario 1: The radius is doubled keeping central angle unchanged. Scenario 2: The central angle is doubled keeping the radius unchanged.</p> <p>a) What is the effect on the area of the original sector in each scenario? b) Which scenario would you choose to maximise the area of the sector?</p>		

<i>Marking Scheme</i>	
<i>Expected Student's Response</i>	<i>Marks</i>
Using the formula for area of a sector, calculates the areas of the new sectors formed as $\frac{\pi}{4}(2)^2$ and $\frac{\pi}{2}(1)^2$ for scenario 1 and 2 respectively. Note: <i>Award 0.5 mark for each scenario</i>	1
<p>a) Finds that the area of the sector increases by $\frac{3\pi}{4}$ in scenario 1 Finds that the area of the sector increases by $\frac{\pi}{4}$ in scenario 2. Note: <i>Award 0.5 mark for each scenario</i></p>	1
b) Chooses scenario 1 to maximise the area of the sector.	1

CRQ 48

Class	10	Subject	Mathematics
Cognitive level	Evaluate	Content Domain	Algebra
Competency	C-8.1 Models daily-life phenomena and uses representations such as graphs, tables, and equations to draw conclusions		
Learning Outcome	Takes decision using the conditions for consistency of a system of equations.		
Marks	3		
Item stem	The siblings Zika and Vana went to a bookstore with ₹ 300. Their mother asked them to divide the amount equally. Zika bought four notebooks of the same price and six pens from a stationery store for ₹ 150. Vana wanted only two notebooks of the same kind. If Vana buys double the number of pens of the same kind as Zika, will Vana be able to use her share of the amount completely? Verify your answer.		
Marking Scheme			
Expected Student's Response			Marks
Taking the price of a notebook as x and the price of a pen as y, expresses the given information about Zika as $4x + 6y = 150$ [or $2x + 3y = 75$]			0.5
Expresses the information about Vana as $2x + 12y = 150$			0.5
Writes the ratios of coefficients as $\frac{4}{2} = 2$, $\frac{6}{12} = \frac{1}{2}$ and $\frac{150}{150} = 1$			0.5
Comparing the ratios, concludes that the system will have a unique solution.			0.5
To verify the decision, solves the two equations to get $x = 25$ and $y = \frac{25}{3}$			0.5
Concludes that Vana can use her share completely if the price of notebook is ₹ 25 and the price of a pen is ₹ $\frac{25}{3}$.			0.5

CRQ 49

Class	10	Subject	Mathematics																
Cognitive level	Evaluate	Content Domain	Mensuration																
Competency	C-5.2 Visualises and uses mathematical thinking to discover formulae to calculate surface areas and volumes of solid objects (cubes, cuboids, spheres, hemispheres, right circular cylinders/cones, and their combinations)																		
Learning Outcome	Evaluates a context using the concept of conservation of volume of solids.																		
Marks	5																		
Item stem	<p>A sports club decides to make shotput balls. The minimum weight of the women's shotput ball in India is 4 kg. They decided to use some cylindrical rods from the attic to make shotput balls of weight 4 kg each.</p> <table border="1"> <thead> <tr> <th>Material</th><th>Approximate Density (in g / cm³)</th><th>Length (in m)</th><th>Radius (in cm)</th></tr> </thead> <tbody> <tr> <td>Brass</td><td>8.7</td><td>1</td><td>14</td></tr> <tr> <td>Steel</td><td>7.9</td><td>2</td><td>7</td></tr> <tr> <td>Iron</td><td>7.8</td><td>0.5</td><td>21</td></tr> </tbody> </table> <p>Which rod(s) should be melted to make shot put balls? How many balls can they get? (Use $\pi = \frac{22}{7}$)</p>			Material	Approximate Density (in g / cm ³)	Length (in m)	Radius (in cm)	Brass	8.7	1	14	Steel	7.9	2	7	Iron	7.8	0.5	21
Material	Approximate Density (in g / cm ³)	Length (in m)	Radius (in cm)																
Brass	8.7	1	14																
Steel	7.9	2	7																
Iron	7.8	0.5	21																
Marking Scheme																			
Expected Student's Response			Marks																
Calculates the volume of each cylindrical rod using the formula $\pi r^2 h$ as Brass rod: 616 cm ³ , Steel rod: 308 cm ³ , Iron rod: 693 cm ³ Note: Even if the calculation is wrong, marks should be awarded for correct substitution in the correct formula			1.5 (0.5 for each)																
Multiplies the volume by the respective density to get the weight of each rod as: Brass rod: 5359.2 g, Steel rod: 2433.2 g, Iron rod: 5405.4 g			1.5																
Compares the weight of the rods with the weight of the shotput ball and concludes that brass and iron rods can be used to make shotput balls.			1																
Writes that two shotput balls can be obtained.			1																

Item Bank – Social Science

Mizoram Board of School Education (MBSE), Mizoram

Introduction

This *Social Science Item Bank* for **Class 10** has been meticulously designed to align with the vision of the **National Education Policy (NEP) 2020** and the academic expectations laid out in the **National Curriculum Framework for School Education (NCF-SE)**. It serves as a comprehensive resource for both **teachers** and **students**, facilitating competency-based assessment.

The Item Bank includes a total of **100 items**, comprising:

- **60 Multiple Choice Questions (MCQs)**, and
- **40 Constructed Response (CR) questions**, which cover a wide range of item types such as short answer, long answer and stimulus based.

Each question is carefully crafted to map to a specific **learning competency**, ensuring that students are assessed not only on content knowledge but also on their ability to **understand, apply, analyse, evaluate, and create** – reflecting a shift from rote learning to deeper understanding and critical thinking. Questions span across various **cognitive levels** in Bloom's taxonomy, providing a balanced mix that caters to all types of learners.

In the case of Constructed Response (CR) items, **detailed marking schemes** have been provided. These include:

- Guidelines for scoring, and
- Scope for **alternative correct answers**, promoting fairness and encouraging creativity in responses.

All items have been developed keeping in mind the key **quality parameters** of **validity** (alignment with learning outcomes), **reliability** (consistency in evaluation), and **fairness** (inclusivity and accessibility for diverse learners).

This Item Bank is intended to support:

- **Teachers**, in designing lesson plans, classroom assessments, and board exam preparation, and
- **Students**, in self-assessment, practice, and gaining familiarity with various question formats and competency-based approaches.

Ultimately, this resource aims to foster **holistic development, critical thinking**, and a **conceptual understanding** of Social Science among students, in alignment with the transformative goals of the NEP 2020.

Summary Table:

Content Domain	Remember	Understand	Apply	Analyse	Evaluate	Create	Total
Geography	7	9	1	1	0	0	18
	1	3	1	4	0	0	9
History	7	10	1	1	0	0	19
	1	3	1	3	2	0	10
Political Science	1	4	1	2	0	0	8
	0	3	1	1	1	0	6
Economics	1	7	1	3	0	0	12
	1	6	2	2	1	0	12
Disaster Management	1	2	0	0	0	0	3
	0	1	1	1	0	0	3
Total	20	48	10	18	4	0	100

N.B. In the above table the content domain is represented by two rows. The upper row represents Multiple Choice Questions, while the lower row represents the Constructed Response Questions.

MCQ: 1

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	History
Competency	C - 2.1 Explains historical events and processes with different types of sources, with specific examples from world history		
Learning Outcome	LO – 1 Recalls names, places, dates, and people associated with some important historical events and developments such as the French Revolution, nationalism, industrialisation, globalisation, and urbanisation.		
Item stem	Arrange the historical events following in the sequence they occurred from old to new:		
Key	Industrial Revolution – French Revolution – Nationalism in Germany – Nationalism in Greece.		
Distractor 1	Nationalism in Greece – Industrial Revolution – Nationalism in Germany – French Revolution.		
Distractor 2	Nationalism in Germany – Nationalism in Greece – French Revolution – Industrial Revolution.		
Distractor 3	French Revolution – Nationalism in Germany – Industrial Revolution – Nationalism in Greece.		

MCQ: 2

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	C- 4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation		
Learning Outcome	LO 2 Classifies and compares events, facts, data, and figures		
Item stem	Which of the following statements is correct about soil in India?		
Key	Leaching decreases the fertility of soil.		
Distractor 1	Afforestation is NOT a method of Soil conservation in hills.		
Distractor 2	Red Soil is highly fertile and suitable for wheat cultivation.		
Distractor 3	Black soil is made of river deposits.		

MCQ: 3

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	C – 4.2 Explains important geographical concepts, characteristics of key landforms, their origin, and other physical factors of a region		
Learning Outcome	LO 1 Recognises and retrieves facts, figures, and narrate processes		
Item stem	The percentage of carbon in anthracite is:		
Key	86 to 97 percent		
Distractor 1	45 to 85 percent		
Distractor 2	35 to 45 percent		
Distractor 3	Lower than 35 percent		

MCQ: 4

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Remember	<i>Content Domain</i>	History
<i>Competency</i>	C – 1.1 Explains historical events and processes using different types of sources, with specific examples from Indian history		
<i>Learning Outcome</i>	LO – 1 Recognises and retrieves facts, figures, and narrate processes		
<i>Item stem</i>	Match the following with appropriate choices; <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> a) Mazzini b) Bismarck c) Garibaldi d) Mihaly Karolyi </div> <div style="width: 45%;"> i) Blood and Iron policy ii) Knight Errant of Italian liberation. iii) Leader of Unite Party of Independence. iv) Young Italy. </div> </div>		
<i>Key</i>	(A) – iv, (B) – I, (C) – ii, (D) – iii		
<i>Distractor 1</i>	(A) – iii, (B) – ii, (C) – iv, (D) – i		
<i>Distractor 2</i>	(A) – i, (B) – iii, (C) – ii, (D) – iv		
<i>Distractor 3</i>	(A) – ii, (B) – iv, (C) – i (D) – iii		

MCQ: 5

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Geography
<i>Competency</i>	C-8.2 Understands and analyses the concepts and practice of the range of economic systems – from free market to entirely statecontrolled markets		
<i>Learning Outcome</i>	Recognises and retrieves facts, figures, and narrate processes		
<i>Item stem</i>	Identify the INCORRECT statement from the following– i) Public Sector industries are owned by the Public. ii) Private Sector industries are owned by private individuals/entities. iii) Joint Sector industries are managed by the government and individuals. iv) Cooperative Sector industries are owned by a group of individuals.		
<i>Key</i>	i)		
<i>Distractor 1</i>	ii)		
<i>Distractor 2</i>	iii)		
<i>Distractor 3</i>	iv)		

MCQ: 6

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Geography
Competency	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation		
Learning Outcome	LO – 3 Explains cause and effect relationship between phenomena, events, and their occurrence		
Item stem	<p>Which of the following are the factors of soil pollution?</p> <p>A) Uses of fertilizer and pesticides.</p> <p>B) Crop rotation.</p> <p>C) Improper waste disposal.</p> <p>D) Industrial waste and discharge.</p> <p>Choose the correct option:</p> <p>1. A, B and C</p> <p>2. A, C and D</p> <p>3. B and C only</p> <p>4. Only A</p>		
Key	A, C and D		
Distractor 1	A, B and C		
Distractor 2	B and C only		
Distractor 3	Only A		

MCQ: 7

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	C.4.1 Locates physiographic regions of India and the climatic zones of the world on a globe/map		
Learning Outcome	LO 1-Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Which of the following Airports are major International Airport in India:</p> <p>A) Netaji Subhas Chandra Bose International Airport, Kolkata.</p> <p>B) Lengpui Airport, Aizawl.</p> <p>C) Chennai International Airport, Chennai.</p> <p>D) Sardar Vallabhbhai Patel International Airport, Ahmadabad.</p> <p>Choose the correct option –</p>		

	i) B and D ii) D only	ii) A, C and D iv) C and D
Key	A, C and D	
Distractor 1	B and D	
Distractor 2	D only	
Distractor 3	C and D	

MCQ: 8

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Geography
Competency	C. 4.1 Locates physiographic regions of India and the climatic zones of the world on a globe/map		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Assertion (A) – The Godden Quadrilateral is known as backbone of India’s National Highway Infrastructure.</p> <p>Reason (B) – The highway projects are being managed by the National Highways Authority of India (NHAI).</p> <p>Select the correct option from the given alternatives.</p> <p>i) (A) is true, but (R) is false</p> <p>ii) (A) is false, but (R) is true</p> <p>iii) Both (A) and (B) are true and (R) is the correct explanation of (A)</p> <p>iv) Both (A) and (B) are true, (R) is not a correct explanation of (A)</p>		
Key	Both (A) and (R) are true and (R) is not a correct explanation of (A)		
Distractor 1	(A) is true, but (R) is false		
Distractor 2	(A) is false, but (R) is true		
Distractor 3	Both (A) and (B) are true, (R) is a correct explanation of (A)		

MCQ: 9

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	History
Competency	C.1.3 Traces aspects of continuity and change in different phases of history across the Indian subcontinent (including cultural trends, social and religious trends and reforms, and economic and political transformations)		
Learning Outcome	Classifies and compares events, facts, data, and figures		
Item stem	<p>Which of the following statements best describe the impact of industrialisation on the production of handicrafts.</p> <p>A) The handicraft production faced challenges as it was labour intensive.</p> <p>B) The demand of handicraft products diminished among poor.</p> <p>C) The informal sector became organised sector.</p> <p>D) Big industrialists invested in handicraft sector.</p>		
Key	A and B		
Distractor 1	A and C		
Distractor 2	A and D		
Distractor 3	B and C		

MCQ: 10

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Remember	<i>Content Domain</i>	History
<i>Competency</i>	C.2.4 Explains the growth of new ideas and practices across the world (including humanism, mercantilism, industrialisation, scientific developments and explorations, imperialism, colonialism, the rise of new nation-states across the world, and various technologies including the most current) and how they affected the course of world history		
<i>Learning Outcome</i>	Recognises and retrieves facts, figures, and narrate processes		
<i>Item stem</i>	<p>Which of the following are correct?</p> <p>A) John Kay invented the flying shuttle.</p> <p>B) Richard Arkwright invented steam engines.</p> <p>C) James Hargreaves invented the cotton – spinning jenny.</p> <p>D) James Watt invented the water frame.</p>		
<i>Key</i>	A and C		
<i>Distractor 1</i>	A and B		
<i>Distractor 2</i>	B and C		
<i>Distractor 3</i>	A and D		

MCQ: 11

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	History
Competency	C-2.3 Traces aspects of continuity and change in different phases of world history (including cultural trends, social and religious reforms, and economic and political transformations)		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence,		
Item stem	<p>Assertion (A): In 1929, the buying of shares at the stock exchange in New York was slowed down.</p> <p>Reason (R): It was the snowballed of world economic crises during 1930's.</p> <p>Select the correct option from the given alternatives.</p> <ol style="list-style-type: none"> 1. (A) is true, but (R) is false. 2. (A) is false, but (R) is true 3. Both (A) and (R) are true and (R) is the correct explanation of (A) 4. Both (A) and (R) are true, but (R) is not a correct explanation of (A) 		
Key	Both (A) and (R) are true and (R) is the correct explanation of (A)		
Distractor 1	(A) is true, but (R) is false.		
Distractor 2	(A) is false, but (R) IS TRUE		
Distractor 3	Both (A) and (R) are true, but (R) is not a correct explanation of (A)		

MCQ: 12

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	History
Competency	C-2.4 Explains the growth of new ideas and practices across the world (including humanism, mercantilism, industrialisation, scientific developments and explorations, imperialism, colonialism, the rise of new nation-states across the world, and various technologies including the most current) and how they affected the course of world history		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Item stem	<p>The causes of colonial expansion by Europe are.</p> <p>A) Need for raw materials.</p> <p>B) Need for cheap labour.</p> <p>C) Need for technology.</p> <p>D) Need for market.</p> <p>Choose the correct option:</p> <p>1) A and B only</p> <p>2) A and C only</p> <p>3) A, B and C only</p> <p>4) A, B and D only</p>		
Key	A, B and D only		
Distractor 1	A and B only		
Distractor 2	A and C only		
Distractor 3	A, B and C only		

MCQ: 13

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	History
Competency	C-1.1 Explains historical events and processes using different types of sources, with specific examples from Indian history		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	Match the following with appropriate choices: <div><div>1) Satyagraha</div><div>2) Jallianwala Bagh</div><div>3) Khilafat Movement</div><div>4) Second Round Table conference</div></div> <div><div>a) Mohammed Ali and Shaukat Ali</div><div>b) Power of Truth</div><div>c) 29th August 1931</div><div>d) on 13th April Baisakhi Day.</div></div>		
Key	A – ii, B – iv, C – I, D – iii.		
Distractor 1	A – I, B – iii, C – iv, D – iii.		
Distractor 2	A – iii, B – i C ii, D – iv.		
Distractor 3	A – ii, B – iv, C – I, D -iii.		

MCQ: 14

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	History
<i>Competency</i>	C-1.1 Explains historical events and processes using different types of sources, with specific examples from Indian history		
<i>Learning Outcome</i>	Recognises and retrieves facts, figures, and narrate processes		
<i>Item stem</i>	<p>Read carefully the statements (A) and (B) about Dandi March and choose the correct answer from the options,</p> <p>A) Dandi March was not opposed to the system of taxation during British colonial rule.</p> <p>B) It was an act of nonviolent civil disobedience movement in colonial India.</p>		
<i>Key</i>	A is false, B is true.		
<i>Distractor 1</i>	A is true, B is false.		
<i>Distractor 2</i>	Both A and B are true		
<i>Distractor 3</i>	Both A and B are false.		

MCQ: 15

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	History
Competency	C-1.4 Explains the growth of new indigenous ideas across India including in Mathematics, Philosophy, Science and Technology, Medicine, Architecture, Agriculture, Literature and Art, and Social Science (such as zero and the Indian number system, ahimsa, the six systems of Indian philosophy, Ayurveda, yoga, the 22 shrutis of Indian music, horticulture, use of herbs and spices, etymology, meters, and grammar) and how they affected the course of Indian and world history		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Item stem	<p>“The first printing press came to India from Portugal, about a hundred years after the Gutenberg bible was printed. This was mainly the work of Jesuits and the Christian missionaries who came along with the Portuguese traders and colonisers following the exploratory journey of Vasco da Gama in 1498.”</p> <p>What was the significance of the printing press in the spread of Christianity in India?</p>		
Key	A. It helped in the mass production of religious texts, aiding missionary efforts.		
Distractor 1	B. It was used exclusively for printing trade documents for Portuguese merchants.		
Distractor 2	C. It limited the influence of Christian missionaries by restricting access to religious texts.		
Distractor 3	D. It was introduced only for governmental administrative purposes		

MCQ: 16

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Remember	<i>Content Domain</i>	History
<i>Competency</i>	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
<i>Learning Outcome</i>	Recognises and retrieves facts, figures, and narrate processes		
<i>Item stem</i>	Match the following with appropriate choices: A. Indian National Congress		

MCQ: 17

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.3 Distinguishes between ‘unorganised’ and ‘organised’ sectors of the economy and their role in production for the local market in small, medium, and large-scale production centres (industries), and recognises the special importance of the so-called ‘unorganised’ sector in Indian economy and its connections with the self-organising features of Indian society		
Learning Outcome	Constructs views, arguments, and ideas on the basis of collected or given information		
Item stem	<p>Assertion (A): The institutional credit is not exploitative in nature.</p> <p>Reason (R): The basic motive of institutional credit is to help the borrowers such as farmers and small-scale industries to raise their productivity.</p> <p>Two statements are given above, statement A is related to assertion, and statement R is related to reason. Review the statements carefully and select the correct option from the given alternatives.</p> <ol style="list-style-type: none"> 1. (A) is true, but (R) is false. 2. (A) is false, but (R) is true 3. Both (A) and (R) are true and (R) is the correct explanation of (A) 4. Both (A) and (R) are true, but (R) is not a correct explanation of (A) 		
Key	Both (A) and (R) are true and (R) is the correct explanation of (A)		
Distractor 1	(A) is true, but (R) is false		
Distractor 2	(A) is false, but (R) is true		
Distractor 3	Both (A) and (R) are true, but (R) is not a correct explanation of (A)		

MCQ: 18

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.1 Defines key features of the economy such as production, distribution, demand, supply, trade, and commerce, and factors that influence these aspects (including technology)		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Match the following with appropriate choices:</p> <p>A. Liberalisation i). Co-existence of public and private sectors.</p> <p>B. Privatisation ii). Opening up the economy to other economics of the world.</p> <p>C. Globalisation iii). Reducing the government control over industry.</p> <p>D. Mixed economy iv). Limiting the role of the public sector in the economy.</p>		
Key	A – iii, B – iv, C – ii, D – i		
Distractor 1	A – iii, B – iv, C – I, D – ii		
Distractor 2	A – iv, B – i, C – ii, D – iii		
Distractor 3	A – iv, B – iii, C – ii, D – i		

MCQ: 19

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.3 Distinguishes between ‘unorganised’ and ‘organised’ sectors of the economy and their role in production for the local market in small, medium, and large-scale production centres (industries), and recognises the special importance of the so-called ‘unorganised’ sector in Indian economy and its connections with the self-organising features of Indian society		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Item stem	<p>Assertion (A): Consumer awareness is needed in order to ensure the availability of quality products.</p> <p>Reason (R): Consumer awareness and education is incomplete without understanding consumer responsibilities and practicing consumer rights.</p> <p>Two statements are given above, statement A is related to assertion, and statement R is related to reason. Review the statements carefully and select the correct option from the given alternatives.</p> <ol style="list-style-type: none"> 1) (A) is true, but (R) is false 2) (A) is false, but (R) is true. 3) Both (A) and (R) are true, (R) is the correct explanation of (A) 4) Both (A) and (R) are true, but (R) is not the correct explanation of (A) 		
Key	Both (A) and (R) are true, but (R) is not the correct explanation of (A)		
Distractor 1	(A) is true, but (R) is false		
Distractor 2	(A) is false, but (R) is true.		
Distractor 3	Both (A) and (R) are true, (R) is the correct explanation of (A)		

MCQ: 20

Class	10	Subject	Social Science
Cognitive level	Apply	Content Domain	Political Science
Competency	C-5.5 Analyses the critical role of non-state and non-market participants in the functioning of a democratic government and society, such as the media, civil society, socio-religious institutions, and community institutions		
Learning Outcome	Analyses and evaluates information,		
Item stem	<p>Though the government has introduced several schemes for poverty eradication, such as Pradhan Mantri Gramodaya Yojana (PMGY), Jawahar Gram Samridhi Yojana, etc, poverty continues to be India's biggest challenge.</p> <p>Choose the correct reasons for endless poverty in rural India.</p> <ol style="list-style-type: none"> 1) Lack of literacy and skills among the people. 2) Migration in the urban areas. 3) Increasing pollution in India. 4) Over dependence on agriculture. 		
Key	I And IV		
Distractor 1	II and III		
Distractor 2	I and III		
Distractor 3	II and IV		

MCQ: 21

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	History
Competency	C-2.3 Traces aspects of continuity and change in different phases of world history (including cultural trends, social and religious reforms, and economic and political transformations)		
Learning Outcome	Analyses and evaluates information,		
Item stem	<p>Consider the statements (A) and (B) about the Great Depression 1929 and choose the correct answer from the options,</p> <p>A) Rumours stated spreading that the boom might be over. This created panic amongst people, and they rushed to sell their shares.</p> <p>B) The United State introduced policy of New Deal to deal in response to Great Depression.</p>		
Key	Both A and B are true.		
Distractor 1	A is true, B is false		
Distractor 2	A is false, B is true		
Distractor 3	Both A and B are false.		

MCQ: 22

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Remember	<i>Content Domain</i>	History
<i>Competency</i>	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
<i>Learning Outcome</i>	Recognises and retrieves facts, figures, and narrate processes		
<i>Item stem</i>	<p>The Non-cooperation Movement was mainly caused by –</p> <p>A) Jallianwala Bhag Massacre.</p> <p>B) Gandhiji's Do or Die call.</p> <p>C) The Rowlatt Act.</p> <p>D) Second World War.</p>		
<i>Key</i>	A and C only		
<i>Distractor 1</i>	A and D only		
<i>Distractor 2</i>	A, B and C only		
<i>Distractor 3</i>	B, C and D only		

MCQ: 23

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Political Science
Competency	C-5.2 Appreciates fundamental Constitutional values and identifies their significance for the prosperity of the Indian nation		
Learning Outcome	Analyses and evaluates information		
Item stem	<p>After gaining independence from British rule, India saw several positive changes in agriculture as part of its development efforts. Which of the following was not a part of these agricultural reforms?</p> <p>A) Well-developed irrigation method</p> <p>B) Introduction of Zamindari system</p> <p>C) Introduction of Yielding variety of seeds.</p> <p>D) Spread of irrigation system.</p>		
Key	B. Zamindari system		
Distractor 1	A. Well-developed irrigation method		
Distractor 2	C. Yielding variety of seeds.		
Distractor 3	D. Chemical fertilizers.		

MCQ: 24

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	C-4.3 Draws inter-linkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife		
Learning Outcome	Analyses and evaluates information		
Item stem	<p>Rabi season ends in –</p> <p>Choose the correct options.</p> <p>A) March</p> <p>B) May</p> <p>C) April</p> <p>D) June</p>		
Key	A and C is correct.		
Distractor 1	A and B is correct		
Distractor 2	A and C is not correct		
Distractor 3	A and D is correct.		

MCQ: 25

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Geography
Competency	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Solar is an example of the following type of resource:</p> <ol style="list-style-type: none"> 1) Renewable Resources. 2) Localised Resources. 3) Non-commercial resources. 4) Individual Resources. <p>Choose the correct options:</p> <ol style="list-style-type: none"> A) i and ii B) i and iii C) iii and iv D) ii and iii 		
Key	B) i and iii		
Distractor 1	A) i and ii		
Distractor 2	C) iii and iv		
Distractor 3	D) ii and iii		

MCQ: 26

Class	10	Subject	Social Science
Cognitive level	Apply	Content Domain	Economics
Competency	C-8.2 Understands and analyses the concepts and practice of the range of economic systems – from free market to entirely statecontrolled markets		
Learning Outcome	Analyses and evaluates information		
Item stem	<p>John is a shopkeeper who accepts cash, digital payments, and even bartering in some cases. However, he notices that digital payments and cash are more convenient than barter. Based on the essential characteristics of money, which of the following best explains why money is preferred over barter?</p> <p>Barter is more efficient than money because it does not require a common measure of value.</p>		
Key	A) Money is a medium of exchange, making transactions easier compared to barter.		
Distractor 1	B) Money does not have any intrinsic value, unlike barter items.		
Distractor 2	C) Money can only be used within a particular region, while barter has universal value.		
Distractor 3	D) Barter is more efficient than money because it does not require a common measure of value.		


MCQ: 27

Class	10	Subject	Social Science												
Cognitive level	Analyse	Content Domain	Economics												
Competency	C-8.1 Gathers, comprehends, and analyses data related to income, capital, poverty, and employment in one’s locality, region and at the national level														
Learning Outcome	Interprets														
Item stem	<p>Analyse the two tables and choose the correct answer from the given options –</p> <p>Table 1:</p> <table><tr><td>Year</td><td>Service Sector contribution to GSVA</td></tr><tr><td>2021-2022</td><td>50.08%</td></tr><tr><td>2022-2023</td><td>45.70%</td></tr></table> <p>Table 2:</p> <table><tr><td>Year</td><td>Industrial Sector contribution to GSVA</td></tr><tr><td>2021-2022</td><td>25.09%</td></tr><tr><td>2022-2023</td><td>34.15%</td></tr></table> <p>Source: Northeast Now</p>			Year	Service Sector contribution to GSVA	2021-2022	50.08%	2022-2023	45.70%	Year	Industrial Sector contribution to GSVA	2021-2022	25.09%	2022-2023	34.15%
Year	Service Sector contribution to GSVA														
2021-2022	50.08%														
2022-2023	45.70%														
Year	Industrial Sector contribution to GSVA														
2021-2022	25.09%														
2022-2023	34.15%														
Key	The industrial sector's contribution to GSVA increased, while the service sector's contribution decreased, indicating a shift towards industrial growth.														
Distractor 1	The service sector's contribution to GSVA increased, indicating a growing dominance in the state's economy.														
Distractor 2	The industrial sector's contribution to GSVA decreased, reflecting a decline in industrial activities.														
Distractor 3	Both the service and industrial sectors maintained a constant share in GSVA, showing economic stability.														

MCQ: 28

Class	10	Subject	Social Science																				
Cognitive level	Analyse	Content Domain	Economics																				
Competency	C-8.1 Gathers, comprehends, and analyses data related to income, capital, poverty, and employment in one's locality, region and at the national level																						
Learning Outcome	Interprets																						
Item stem	<p>Share of different sectors in the Gross Domestic Product (GDP) of India at central price.</p> <table border="1"> <thead> <tr> <th></th><th colspan="3">Percentage share in GDP</th></tr> <tr> <th>Sectors</th><th>1950 – 51</th><th>1993 – 94</th><th>2012 – 13</th></tr> </thead> <tbody> <tr> <td>Agri and Allied sector</td><td>51.9</td><td>28.7</td><td>13.9</td></tr> <tr> <td>Industrial sector</td><td>18.6</td><td>25.8</td><td>27.3</td></tr> <tr> <td>Service sector</td><td>29.5</td><td>45.5</td><td>58.8</td></tr> </tbody> </table> <p>Analyse the given table and choose the correct answer from the given options –</p> <p>A. Agriculture and Allied sectors share are most important in the beginning.</p> <p>B. Growth rate of Agriculture and Allied sectors is slowest among the three sectors.</p> <p>C. Growth rate of industrial sector is higher than service sector.</p> <p>Options:</p> <ol style="list-style-type: none"> A B A and B A, B and C 				Percentage share in GDP			Sectors	1950 – 51	1993 – 94	2012 – 13	Agri and Allied sector	51.9	28.7	13.9	Industrial sector	18.6	25.8	27.3	Service sector	29.5	45.5	58.8
	Percentage share in GDP																						
Sectors	1950 – 51	1993 – 94	2012 – 13																				
Agri and Allied sector	51.9	28.7	13.9																				
Industrial sector	18.6	25.8	27.3																				
Service sector	29.5	45.5	58.8																				
Key	A and B																						
Distractor 1	A																						
Distractor 2	B																						
Distractor 3	A, B and C																						

MCQ: 29

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	History
Competency	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Item stem	 <p>The two flags shown represent India before and after independence. Analysing the differences between them, what do the changes in the flag signify?</p>		
Key	The Ashoka Chakra in the post-independence flag represents law, progress, and righteousness, emphasizing unity and continuity.		
Distractor 1	The replacement of the spinning wheel (Charkha) with the Ashoka Chakra symbolizes a shift from self-reliance to industrialization.		
Distractor 2	The pre-independence flag was rejected because it did not have the required three colours.		
Distractor 3	The Charkha was removed as it was a British symbol, and the Ashoka Chakra was introduced to represent India's colonial past.		

MCQ: 30

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	History
Competency	C-2.1 Explains historical events and processes with different types of sources, with specific examples from world history		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes,		
Item stem	<p>Which one of the following statements is factually correct about the unification of Italy.</p> <p>A. Garibaldi founded Young Italy</p> <p>B. Bismark a man of action and knight – errant.</p> <p>C. Cavour was a man of wisdom and foresight.</p> <p>D. Rome became the capital of Italy.</p> <p>Options:</p> <p>1. A and B only</p> <p>2. A and D only</p> <p>3. B and C only</p> <p>4. C and D only</p>		
Key	C and D only		
Distractor 1	A and B only		
Distractor 2	A and D only		
Distractor 3	B and C only		

MCQ: 31

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	History
Competency	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	What was the immediate impact of the Jallianwala Bagh massacre on the Indian freedom movement?		
Key	It strengthened the movement against the British and led to nationwide protests.		
Distractor 1	It resulted in Indians supporting British rule out of fear.		
Distractor 2	It led to the formation of a new British government in India		
Distractor 3	It was ignored by Indian leaders as an isolated incident.		

MCQ: 32

Class	10	Subject	Social Science
Cognitive level	Analyse	Content Domain	Political Science
Competency	C-5.4 Analyses the basic features of a democracy and democratic government – and its history in India and across the world – and compares this form of government with other forms of government		
Learning Outcome	Analyses and evaluates information		
Item stem	<p>Which of the following statements are correct regarding the formation of a government at the Centre or State level in India?</p> <p>A) A government can be formed by a political party or a coalition that secures a simple majority in the election.</p> <p>B) Independent candidates can also support a party or coalition to help form the government.</p> <p>C) Only political parties registered with the Election Commission can form a government.</p> <p>D) A government can only be formed by multiple political parties coming together, even if a single party has a majority.</p>		
Key	A and B		
Distractor 1	A and C		
Distractor 2	A, B and D		
Distractor 3	D		


MCQ: 33

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Political Science
Competency	C-5.4 Analyses the basic features of a democracy and democratic government – and its history in India and across the world – and compares this form of government with other forms of government		
Learning Outcome	Analyses and evaluates information		
Item stem	<p>Assertion (A): The Constitution of India describes India as a Union of States.</p> <p>Reason (R): India is a federation of many states with very decentralised governance.</p> <p>Two statements are given above, statement A is related to assertion, and statement R is related to reason. Review the statements carefully and select the correct option from the given alternatives.</p> <p>A. Both (A) and (B) are true, but (R) is the correct explanation of (A)</p> <p>B. Both (A) and (B) are true, but (R) is not the correct explanation of (A)</p> <p>C. (A) is correct but (R) is wrong</p> <p>D. (A) is wrong but (R) is correct.</p>		
Key	(A) is correct but (R) is wrong		
Distractor 1	Both (A) and (B) are true, but (R) is not the correct explanation of (A)		
Distractor 2	Both (A) and (B) are true, but (R) is the correct explanation of (A)		
Distractor 3	(A) is wrong but (R) is correct.		

MCQ: 34

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India		
Learning Outcome	Analyses and evaluates information		
Item stem	<p>Assertion (A): The service sector is a major contributor to India's GDP, providing employment opportunities and driving economic development.</p> <p>Reason (R): In India service sector is limited to education and healthcare.</p> <p>Two statements are given above, statement A is related to asession, and statement R is related to reason. Review the statements carefully and select the correct option from the given alternatives.</p> <p>Options:</p> <ol style="list-style-type: none"> Both (A) and (B) are true and (R) is the right explanation of (A) Both (A) and (B) are true but (R) is not the correct explanation of (A) (A) is correct but (R) is wrong (A) is wrong but (R) is correct. 		
Key	(A) is correct but (R) is wrong		
Distractor 1	Both (A) and (B) are true and (R) is the right explanation of (A)		
Distractor 2	Both (A) and (B) are true but (R) is not the correct explanation of (A)		
Distractor 3	(A) is wrong but (R) is correct.		

MCQ: 35

Class	10	Subject	Social Science
Cognitive level	Analyse	Content Domain	Geography
Competency	C-4.1 Locates physiographic regions of India and the climatic zones of the world on a globe/map		
Learning Outcome	Interpret		
Item stem	<p>A map showing locations of sea ports in India is given below. Now based on the Map which of the following ports will be most suitable for exporting goods from Eastern India to Southeast Asia</p>  <p>A. Mumbai & Kandla</p> <p>B. Cochin, Panaji, Mumbai, Tuticorin</p> <p>C. Haldia, Paradip, Vishakhapatnam, Chennai, Tuticorin</p> <p>D. Cochin, Mangalore, Tuticorin</p>		
Key	C		
Distractor 1	A		
Distractor 2	B		
Distractor 3	D		

MCQ: 36

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India		
Learning Outcome	Analyses and evaluates information		
Item stem	<p>In Indian Economy, the three sectors (Primary, Secondary and Tertiary) are important. However, the share of employment in the primary sector remains high.</p> <p>Most Appropriate explanation for this could be:</p> <ol style="list-style-type: none"> 1. Government policies preferentially treat the primary sector. 2. Majority of population depends upon agriculture, which is subsistence in its nature. 3. Inadequate service sector jobs force people to continue working in primary sectors. 4. Primary sector provides raw materials for the secondary and tertiary sector. <p>Choose the correct option:</p> <ol style="list-style-type: none"> A. Only 1 and 2 are true B. Only 2 and 3 are true C. Only 3 and 4 are true D. Only 2, 3 and 4 are true. 		
Key	B		
Distractor 1	A		
Distractor 2	C		
Distractor 3	D		

MCQ: 37

Class	10	Subject	Social Science
Cognitive level	Analyse	Content Domain	History
Competency	C-2.5 Recognises the various practices that arose, such as those in C-2.4, and came to be condemned later on (such as racism, slavery, colonial invasions, conquests, and plunder, genocides, exclusion of women from democratic and other institutions), all of which have also impacted the course of world history and have left unhealed wounds		
Learning Outcome	Retrieve Facts		
Item stem	Which of the following represents the correct chronological order of events leading up to the Civil Disobedience Movement?		
Key	Simon Commission arrives in India → Nehru Report → Lahore Session of Congress (Purna Swaraj) → Civil Disobedience Movement begins.		
Distractor 1	Lahore Session of Congress (Purna Swaraj) → Simon Commission arrives in India → Nehru Report → Civil Disobedience Movement begins.		
Distractor 2	Civil Disobedience Movement begins → Simon Commission arrives in India → Nehru Report → Lahore Session of Congress.		
Distractor 3	Nehru Report → Simon Commission arrives in India → Civil Disobedience Movement begins → Lahore Session of Congress.		

MCQ: 38

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	History
<i>Competency</i>	C-3.1 Analyses the meaning of nation and how the concept evolved over time across the world and in the specific context of India, including its roots in the rich civilisational history of the Indian subcontinent		
<i>Learning Outcome</i>	Analyses and evaluates information		
<i>Item stem</i>	<p>Which of the following factors have contributed to the process of globalization?</p> <p>Select the correct options:</p> <ol style="list-style-type: none"> 1. Expansion of Multinational Corporations (MNC'S) 2. Advancements in information and communication technology. 3. Nationalisation and trade barriers. 4. Cross – border movement of people for jobs and education. 		
<i>Key</i>	1, 2 & 4		
<i>Distractor 1</i>	1 & 3		
<i>Distractor 2</i>	2 & 4		
<i>Distractor 3</i>	3		

MCQ: 39

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Analyse	<i>Content Domain</i>	Political science
<i>Competency</i>	C-6.2 Understands that, despite C-6.1, forms of inequality, injustice, and discrimination have occurred in different sections of society at different times (due to internal as well as outside forces such as colonisation), leading to political, social, and cultural efforts, struggles, movements, and mechanisms at various levels towards equity, inclusion, justice, and harmony, with varying outcomes and degrees of success		
<i>Learning Outcome</i>	Explains cause and effect relationship between phenomena, events, and their occurrence		
<i>Item stem</i>	Despite legal reforms promoting gender equality, patriarchal norms continue to influence many aspects of society. Which of the following situations best illustrates the persistence of patriarchy in a modern society?		
<i>Key</i>	Women are expected to take on most household responsibilities, even when they have full-time jobs.		
<i>Distractor 1</i>	A company implements an equal pay policy for men and women.		
<i>Distractor 2</i>	A government introduces laws to ensure women's representation in politics.		
<i>Distractor 3</i>	Schools provide the same educational opportunities to both boys and girls.		

MCQ: 40

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Geography
Competency	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Item stem	<p>Consider the following statements:</p> <p>(A) Assertion (A): Industries are index of the development in a country</p> <p>(B) Reason (R): Industries cause pollution and environmental degradation.</p> <p>A) Both Assertion (A) and Reason (R) are true, and (R) is the correct explanation of (A).</p> <p>B) Both Assertion (A) and Reason (R) are true, but (R) is not the correct explanation of (A).</p> <p>C) Assertion (A) is true, but Reason (R) is false.</p> <p>D) Assertion (A) is false, but Reason (R) is true.</p>		
Key	B		
Distractor 1	A		
Distractor 2	C		
Distractor 3	D		

MCQ: 41

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Item stem	<p>State whether the following statements are correct about the textile industry in India?</p> <p>A. Cotton textile industry is the largest industry in India.</p> <p>B. States like Gujarat and Maharashtra provides raw materials for the industry.</p> <p>C. Humidity is not suitable for the production of yarn.</p> <p>Choose the correct option:</p> <p>1. A, B and C</p> <p>2. A</p> <p>3. A and B</p> <p>4. B</p>		
Key	A and B		
Distractor 1	A, B and C		
Distractor 2	A		
Distractor 3	B		

MCQ: 42

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	Locates physiographic regions of India and the climatic zones of the world on a globe/map		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Consider the statement A and B about Zonal Railways and its headquarters and choose the correct options:</p> <p>A. South – central railway headquarters in Secunderabad.</p> <p>B. East coast railway headquarters is Bhubaneswar.</p> <p>1. A is true, B is false</p> <p>2. A is false B is true</p> <p>3. Both A and B are true</p> <p>4. Both A and B are false</p>		
Key	Both A and B are true		
Distractor 1	A is true, B is false		
Distractor 2	A is false B is true		
Distractor 3	Both A and B are false		

MCQ: 43

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-8.1 Gathers, comprehends, and analyses data related to income, capital, poverty, and employment in one's locality, region and at the national level		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Item stem	<p>Assertion (A): A country whose trade quotient with other countries is not very high is said to have an unstable economy.</p> <p>Reason (R): If the value of a country's export is more than its imports, it is referred to as favourable balance of trade.</p> <p>Two statements are given above, statement A is related to assessment, and statement R is related to reason. Review the statements carefully and select the correct option from the given alternatives.</p> <p>Options:</p> <ol style="list-style-type: none"> 1. (A) is true, but (R) is false 2. (A) is false, but (R) is true 3. Both (A) and (R) are true and (R) is the correct explanation of (A) 4. Both (A) and (R) are true, but (R) is not the correct explanation of (A). 		
Key	Both (A) and (R) are true and (R) is not the correct explanation of (A)		
Distractor 1	(A) is true, but (R) is false		
Distractor 2	(A) is false, but (R) is true		
Distractor 3	Both (A) and (R) are true, but (R) is the correct explanation of (A).		

MCQ: 44

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Geography
Competency	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	Which of the following power resources has been the most commonly used for electricity generation in thermal power plants over the past century?		
Key	Coal		
Distractor 1	Natural Gas		
Distractor 2	Petroleum		
Distractor 3	Solar		

MCQ: 45

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	C-4.1 Locates physiographic regions of India and the climatic zones of the world on a globe/map		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	Identify the correct statement – 1. Kochin port in Kerala 2. Jawaharlal Nehru port in Goa 3. Kandla port in Mumbai 4. Marmagao port in Karnataka.		
Key	Kochin port is in Kerala		
Distractor 1	Jawaharlal Nehru port in Goa		
Distractor 2	Kandla port is in Mumbai		
Distractor 3	Marmagao port is in Karnataka		

MCQ: 46

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Geography
<i>Competency</i>	C-4.3 Draws inter-linkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife		
<i>Learning Outcome</i>	Recognises and retrieves facts, figures, and narrate processes		
<i>Item stem</i>	How are forests classified in India based on ownership and management? Choose the correct options:		
<i>Key</i>	Reserved Forests, Protected Forests, and Unclassified Forests		
<i>Distractor 1</i>	Evergreen Forests, Deciduous Forests, and Thorny Forests		
<i>Distractor 2</i>	Tropical Forests, Temperate Forests, and Alpine Forests		
<i>Distractor 3</i>	Mangrove Forests, Montane Forests, and Rainforests		

MCQ: 47

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Geography
Competency	C-4.3 Draws inter-linkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Arrange the following steps in the correct order to ensure the sustainable use of natural resources:</p> <ol style="list-style-type: none"> 1. Promote renewable energy sources like solar and wind energy. 2. Reduce overexploitation of forests, water, and minerals. 3. Implement policies for conservation and responsible usage. 4. Spread awareness about environmental protection 		
Key	A) 4 → 3 → 2 → 1		
Distractor 1	B) 2 → 3 → 4 → 1		
Distractor 2	C) 3 → 4 → 1 → 2		
Distractor 3	D) 1 → 2 → 3 → 4		

MCQ: 48

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	History
Competency	C-2.4 Explains the growth of new ideas and practices across the world (including humanism, mercantilism, industrialisation, scientific developments and explorations, imperialism, colonialism, the rise of new nation-states across the world, and various technologies including the most current) and how they affected the course of world history		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Match the following key events and figures related to Giuseppe Garibaldi and the unification of Italy:</p> <ol style="list-style-type: none"> 1. Giuseppe Garibaldi A. Led the "Red Shirts" in southern Italy to unify regions. 2. Count Cavour B. Prime Minister of Sardinia-Piedmont who played a key diplomatic role in unification. 3. 1861 C. The year when Italy was officially unified under King Victor Emmanuel II. 4. Rome D. Became the capital of unified Italy in 1871. 		
Key	1 → A, 2 → B, 3 → C, 4 → D		
Distractor 1	1 → A, 2 → C, 3 → B, 4 → D		
Distractor 2	1 → C, 2 → A, 3 → B, 4 → D		
Distractor 3	1 → B, 2 → D, 3 → A, 4 → C		

MCQ: 49

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Geography
<i>Competency</i>	C-4.2 Explains important geographical concepts, characteristics of key landforms, their origin, and other physical factors of a region		
<i>Learning Outcome</i>	Recognises and retrieves facts, figures, and narrate processes		
<i>Item stem</i>	<p>Alluvial soil is a mixture of the followings:</p> <p>A. Black and forest soil.</p> <p>B. Arid and laterite soil.</p> <p>C. Silt and clay.</p> <p>D. Mud and clay.</p>		
<i>Key</i>	Silt and clay.		
<i>Distractor 1</i>	Black and forest soil.		
<i>Distractor 2</i>	Arid and laterite soil		
<i>Distractor 3</i>	Mud and clay.		

MCQ: 50

Class	10	Subject	Social Science
Cognitive level	Apply	Content Domain	Geography
Competency	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	Champhai district of Mizoram faces high power cut in the summer due to various reasons. Which of the following measure will be the most suitable for ensuring a sustainable and reliable power supply?		
Key	Setting up solar power plants and encouraging rooftop solar panels.		
Distractor 1	Encouraging the use of coal-based thermal power plants.		
Distractor 2	Promoting large-scale hydropower projects in the region.		
Distractor 3	Relying on imported fossil fuels for power generation.		


MCQ: 51

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India		
Learning Outcome	Classifies and compares events, facts, data, and figures		
Item stem	Which of the following statements best describes public sector industries in India? Public sector industries?		
Key	The government owns and controls these industries to provide essential services and promote economic development.		
Distractor 1	They are owned and operated by private individuals for profit.		
Distractor 2	They are small-scale industries that do not require government involvement.		
Distractor 3	These industries are only involved in producing consumer goods for the public.		

MCQ: 52

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	C-4.1 Locates physiographic regions of India and the climatic zones of the world on a globe/map		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>The river Damodar was known as:</p> <p>A. Gift of Bengal</p> <p>B. Sorrow of Bengal</p> <p>C. Huang – Ho of Bengal</p> <p>D. Nile of Bengal.</p>		
Key	B. Sorrow of Bengal		
Distractor 1	A. Gift of Bengal		
Distractor 2	C. Huang – Ho of Bengal		
Distractor 3	D. Nile of Bengal		

MCQ: 53

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	History
Competency	C-2.1 Explains historical events and processes with different types of sources, with specific examples from world history		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	 <p>What flag is it?</p>		
Key	Flag of Swaraj		
Distractor 1	Flag of Rastriya Swayamsevak Sang.		
Distractor 2	Flag of Bharatiya Janata Party		
Distractor 3	Flag of Communist Party of India		





MCQ: 54

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Political science
Competency	C-5.1 Understands that the Indian Constitution draws from the great cultural heritage and common aspirations of the Indian nation, and recalls India's early experiments with democracy		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Matching the following and select the correct answer using the codes below in the list:</p> <p>A. Dominance i) The process of bringing people together for collective action, especially in movements or protests.</p> <p>B. Mobilisation ii). A situation where one group asserts power over others, often leading to social or political imbalance.</p> <p>C. Communalism iii) Generalized and often inaccurate perceptions about a group, reinforcing biases and discrimination.</p> <p>D. Stereotyping iv) A belief that one's religious or ethnic identity is superior, leading to divisions in society.</p>		
Key	1. A – ii, B – i, C – iv, D – iii		
Distractor 1	2. A – iii, B – i, C – ii, D – iv		
Distractor 2	3. A – iv, B -iii, C – I, D – ii		
Distractor 3	4. A – ii, B – i, C – iii, D – iv		

MCQ: 55

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Political Science
Competency	C-5.1 Understands that the Indian Constitution draws from the great cultural heritage and common aspirations of the Indian nation, and recalls India's early experiments with democracy		
Learning Outcome	Classifies and compares events, facts, data, and figures		
Item stem	Which of the following best explains the idea of power sharing in a democracy?		
Key	Power sharing helps reduce conflicts between different social groups.		
Distractor 1	Power sharing ensures that only the majority community rules.		
Distractor 2	Power sharing allows one organ of government to dominate the others.		
Distractor 3	Power sharing is a way to delay decision-making in a democracy.		

MCQ: 56

Class	10	Subject	Social Science
Cognitive level	Apply	Content Domain	Political Science
Competency	C-5.4 Analyses the basic features of a democracy and democratic government – and its history in India and across the world – and compares this form of government with other forms of government		
Learning Outcome	Classifies and compares events, facts, data, and figures		
Item stem	<p>The following shows the symbols of some major political parties of India. Identify the parties.</p> <p>(A) </p> <p>(B) </p> <p>(C) </p> <p>(D) </p>		
Key	(A) INC, (B) BJP, (C) CPI(M), (D) MNF		
Distractor 1	(A) BJP, (B) INC, (C) MNF, (D) CPI (M)		
Distractor 2	(A) CPI(M), (B) BJP, (C) INC, (D) MNF		
Distractor 3	(A) CPI(M), (B) MNF, (C) BJP, (D) INC		

MCQ: 57

Class	10	Subject	Social Science																				
Cognitive level	Analyse	Content Domain	Economics																				
Competency	C-8.1 Gathers, comprehends, and analyses data related to income, capital, poverty, and employment in one's locality, region and at the national level																						
Learning Outcome	Analyses and evaluates information																						
Item stem	<table border="1"> <thead> <tr> <th></th><th colspan="3">Percentage share in GDP</th></tr> <tr> <th>Sectors</th><th>1950 – 51</th><th>1993 – 94</th><th>2012 – 13</th></tr> </thead> <tbody> <tr> <td>Agri and Allied sector</td><td>51.9</td><td>28.7</td><td>13.9</td></tr> <tr> <td>Industrial sector</td><td>18.6</td><td>25.8</td><td>27.3</td></tr> <tr> <td>Service sector</td><td>29.5</td><td>45.5</td><td>58.8</td></tr> </tbody> </table> <p>Share of different sectors in the Gross Domestic Product (GDP) of India at central price.</p> <p>Analyse the given table and choose the correct answer from the given options –</p> <p>A) Agriculture and Allied sectors share is most important in the beginning.</p> <p>B) Growth rate of Agriculture and Allied sectors is slowest among the three sectors.</p> <p>C) Growth rate of industrial sector is higher than service sector.</p> <p>Options:</p> <p>A) A</p> <p>B) B</p> <p>C) A & B</p> <p>D) B & C</p>				Percentage share in GDP			Sectors	1950 – 51	1993 – 94	2012 – 13	Agri and Allied sector	51.9	28.7	13.9	Industrial sector	18.6	25.8	27.3	Service sector	29.5	45.5	58.8
	Percentage share in GDP																						
Sectors	1950 – 51	1993 – 94	2012 – 13																				
Agri and Allied sector	51.9	28.7	13.9																				
Industrial sector	18.6	25.8	27.3																				
Service sector	29.5	45.5	58.8																				
Key	A and B																						
Distractor 1	A																						
Distractor 2	B																						
Distractor 3	B and C																						

MCQ: 58

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Disaster Management
Competency	C-8.5 Appreciates the connections between economic development and the environment, and the broader indicators of societal well-being beyond GDP growth and income		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	The Disaster Management Act in India was enacted in which year?		
Key	2005		
Distractor 1	2003		
Distractor 2	2006		
Distractor 3	2009		

MCQ: 59

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Disaster Management
Competency	C-8.5 Appreciates the connections between economic development and the environment, and the broader indicators of societal well-being beyond GDP growth and income		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	<p>Assertion (A): Disaster preparedness helps reduce the impact of disasters. Reason (R): It includes only post-disaster relief and reconstruction activities. Choose the correct option: A) Both A and R are true, and R is the correct explanation of A. B) Both A and R are true, but R is not the correct explanation of A. C) A is true, but R is false. D) A is false, but R is true.</p>		
Key	C) A is true, but R is false.		
Distractor 1	A) Both A and R are true, and R is the correct explanation of A.		
Distractor 2	B) Both A and R are true, but R is not the correct explanation of A.		
Distractor 3	D) A is false, but R is true.		

MCQ: 60

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Disaster Management
Competency	C-8.5 Appreciates the connections between economic development and the environment, and the broader indicators of societal well-being beyond GDP growth and income		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Item stem	Which of the following are part of disaster preparedness measures? A) Organizing mock drills B) Providing insurance after disasters C) Installing early warning systems D) Community awareness and education		
Key	A) & B)		
Distractor 1	A) & C)		
Distractor 2	B) C) & D)		
Distractor 3	C) & D)		

CR: 1

Class	10	Subject	Social Science
Cognitive level	Evaluate	Content Domain	History
Competency	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
Learning Outcome	Analyses and evaluates information		
Marks	4		
Item stem	<p><i>Mahatma Gandhi strongly believed in non-violence (Ahimsa) as the most powerful weapon against British rule. Movements like the Non-Cooperation Movement, Civil Disobedience Movement, and Quit India Movement were based on this principle. However, some leaders and revolutionaries believed that armed resistance was necessary for freedom.</i></p> <p>Do you agree that non-violence was the most effective strategy in India’s struggle for independence? Justify your answer with suitable historical examples.</p>		
Expected Students Response			Marks
If the student agrees the statement, the expected responses are: <ul style="list-style-type: none">○ Non-violence was effective because it gained mass support and			

included people from all sections of society.

- Movements like the **Salt March (1930)** and **Quit India Movement (1942)** united Indians against British rule.
- The British found it difficult to suppress **peaceful protests**, as violent crackdowns led to international criticism.
- The **moral and ethical strength** of non-violence gained sympathy worldwide, influencing British decisions.
- Eventually, non-violent resistance **forced the British to leave India in 1947**.

If the student disagrees or partially agrees with the statement, the expected responses are:

- Some leaders, like Bhagat Singh, Subhas Chandra Bose, and the INA (Indian National Army), believed that non-violence alone was not enough.
- Revolutionary activities, such as the Kakori Conspiracy (1925) and the bomb attack in the Central Legislative Assembly (1929), played a role in shaking British confidence.
- The Naval Mutiny of 1946 and Bose's INA's role in WWII created pressure on the British.
- Some argue that economic and political factors, rather than non-violence alone, led to India's independence.

The student might give a response looking at both the side and the expected responses can be:

- While **non-violence mobilized the masses and gained global support**, armed resistance also played a role in pressuring the British.
- India's freedom was a result of **multiple strategies**, including both non-violent movements and revolutionary actions.
- The British ultimately left due to **a combination of political, economic, and social factors**, along with international pressure after WWII.

Marking Scheme

4 points mentioned

4 marks

3 points mentioned

3 marks

2 points mentioned

2 marks

1 point mentioned

1 mark

Irrelevant and no answer

0

Class	10	Subject	Social Science
Cognitive level	Analyse	Content Domain	History
Competency	C-2.5 Recognises the various practices that arose, such as those in C-2.4, and came to be condemned later on (such as racism, slavery, colonial invasions, conquests, and plunder, genocides, exclusion of women from democratic and other institutions), all of which have also impacted the course of world history and have left unhealed wounds		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Marks	4		
Item stem	How did the idea of nationalism develop in India during the colonial period?		
Expected Students Response			Marks
There can be different responses to it. However, expected responses are: <ul style="list-style-type: none">British Policies & Economic Exploitation: High taxes, destruction of Indian industries, and economic drain made Indians realize the need for self-rule.Influence of Western Education & Ideas: Concepts like liberty, equality, and democracy (from the French & American revolutions) inspired educated Indians.Press & Literature: Newspapers like Kesari and Hind Swaraj spread nationalist ideas. Books by Bankim Chandra Chattopadhyay and Rabindranath Tagore instilled patriotic feelings.Political Movements:<ul style="list-style-type: none">Early Phase (Moderates - 1885-1905): Demanded reforms through petitions.Extremists (1905-1919): Leaders like Bal Gangadhar Tilak promoted “Swaraj is my birthright”.Gandhian Era (1919-1947): Non-Cooperation, Civil Disobedience, and Quit India Movements mobilized the masses.Revolutionary Movements: Bhagat Singh, Subhas Chandra Bose, and the INA challenged British rule through militant actions. Any other valid and relevant response.			
Marking Scheme			
If students give all the responses and explains it.			4 marks
If the student mentions the point and do not explain it.			2.5 marks
2 points mentioned			2 marks
1 point mentioned			1 mark
Irrelevant and no answer			0

Class	10	Subject	Social Science
Cognitive level	Analyse	Content Domain	Economics
Competency	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country’s economy, especially India		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Marks	4		
Item stem	“Agriculture gives boost to the industrial sector”. Justify the statement with any four relevant points.		
Expected Students Response			Marks
Agriculture gives boost to the industrial sector in the following ways: <div><div>1.</div><div>Raw materials: agriculture provides raw materials to a large number of industries (textile, silk, sugar, oil, rice, flour, milk etc). As a supplier of raw materials, agricultural sector is of primary significance for the growth of industrial sector in economy.</div></div> <div><div>2.</div><div>Market expansion: Agriculture provides a vast market for industrial products. For examples, the use of agriculture machinery such as tractors, tillers and harvesters create a demand for industrial goods including steel, plastics and rubber.</div></div> <div><div>3.</div><div>Employment generation: agriculture is a labour-intensive sector that generates employment opportunities for a significant population in India. Agriculture related industries such as food processing and agro chemicals also create job opportunities especially in rural areas.</div></div> <div><div>4.</div><div>Economic development impact: A thriving agriculture sector contributes to overall economic growth by providing a stable income source and enabling investment in infrastructural, creating a conducive environment for industrial expansion.</div></div>			
Marking Scheme			
4 points mentioned			4 marks
3 points mentioned			3 marks
2 points mentioned			2 marks
1 point mentioned			1 mark
Irrelevant and no answer			0

CR: 4

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Disaster Management
<i>Competency</i>	C-4.1 Locates physiographic regions of India and the climatic zones of the world on a globe/map		
<i>Learning Outcome</i>	Analyses and evaluates information		
<i>Marks</i>	2		
<i>Item stem</i>	According to the earthquake experts, Mizoram region is believed to be prone to periodic major quakes categorised at the seismic zone 5. Mention any two measures the community should take if disaster like earthquake occurs in Mizoram?		
<i>Expected Students Response</i>			<i>Marks</i>
1. Preparedness 2. Relief and response. 3. Recovery, Rehabilitation and Reconstruction. 4. Moral strength and public opinion are encouraged. 5. Any other relevant responses.			
<i>Marking Scheme</i>			
<i>2 clear measures</i>			<i>2 marks</i>
<i>2 unclear measures</i>			<i>1 mark</i>
<i>1 clear measures</i>			<i>1 mark</i>
<i>1 unclear measure</i>			<i>0.5 mark</i>
<i>Irrelevant and no answer</i>			<i>0</i>

CR: 5

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Analyse	<i>Content Domain</i>	History
<i>Competency</i>	C-2.1 Explains historical events and processes with different types of sources, with specific examples from world history		
<i>Learning Outcome</i>	Classifies and compares events, facts, data, and figures		
<i>Marks</i>	4		
<i>Item stem</i>	Compare and contrast the similarities between the unification of Germany and Italy. Mention any four points.		
<i>Expected Students Response</i>			<i>Marks</i>
1. Both the countries were influence by the French Revolution and Napoleon. 2. Both cooperated with each other in emergency and had to deal with Austria as an obstacle to their respective unifications. 3. Both the countries faced diverse problems and solved them following policies which they found expedient. 4. Besides, the task of unification of both the countries was completed almost at the same time.			
<i>Marking Scheme</i>			
<i>4 points mentioned</i>			<i>4 marks</i>
<i>3 points mentioned</i>			<i>3 marks</i>
<i>2 points mentioned</i>			<i>2 marks</i>
<i>1 point mentioned</i>			<i>1 mark</i>
<i>Irrelevant and no answer</i>			<i>0</i>

Class	10	Subject	Social Science
Cognitive level	Evaluate	Content Domain	History
Competency	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Marks	4		
Item stem	Evaluate the significance of tribal movements in colonial India with two appropriate examples.		
Expected Students Response			Marks
The Tribal movements in colonial India were different in character from the movements launched by other communities. The movement began because the tribals were reduced to a minority due to the influx of outsiders and were exposed to changes. Majority of them were reduced to agricultural labourers on their own lands as well as against forced displacement and forced labour which were brought through permanent settlement, zamindari system and forest laws. The following examples are expected: 1. Santhal Rebellion: This rebellion covered parts of Odisha and Jharkhand. It was targeted against outsiders. 2. Munda Uprising: The Munda uprising took place due to the agrarian disorder brought about by the changes introduced by the British government.			
Marking Scheme			
If the student gives a proper explanation and 2 examples			4 marks
If the student gives proper significance and 1 example			3 marks
Only describes the Significance but no Example			2 marks
Gives only 2 examples without describing the significance			2 Marks
Gives only 1 example			1 Mark

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Economics
Competency	C-7.1 Defines key features of the economy such as production, distribution, demand, supply, trade, and commerce, and factors that influence these aspects (including technology)		
Learning Outcome	Classifies and compares events, facts, data, and figures		
Marks	4		
Item stem	Define Consumers Awareness. Describe any three points for the need of consumer awareness. 1+3= 4		
Expected Students Response			Marks
<ul style="list-style-type: none">Consumer Awareness refers to a consumer's understanding of their rights, responsibilities, and available choices while purchasing goods and services. It helps individuals make informed decisions, avoid exploitation, and seek legal protection against unfair trade practices.It is the process of making the consumers aware of the characteristic of the products and services purchased by them. <p>The following points are given below:</p> <ol style="list-style-type: none">Prevention from exploitation; consumer awareness is needed to prevent the exploitation of consumers at the hand of traders and manufactures.Decision – making: Consumer awareness would play an important role in making the consumers knowledgeable about the products/services.Check the wrongdoing: Knowledgeable and alert consumers would become aware of their rights and responsibilities as consumers.			<p><i>The student can write any one or any relevant answer for 1 Mark</i></p>
Marking Scheme			
Defines the first question			1 mark
Mentions three points			3 marks
Mentions two points			2 marks
Mentions one point			1 mark
Irrelevant or no answer			0

Class	10	Subject	Social Science
Cognitive level	Analyses	Content Domain	Geography
Competency	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Marks	4		
Item stem	Explain the concept of the Green Revolution and describe how it impacted agriculture in India.		
Expected Students Response			Marks
<p>The Green Revolution refers to the introduction of high-yield variety (HYV) seeds, chemical fertilizers, pesticides, and modern irrigation techniques in Indian agriculture during the 1960s and 1970s.</p> <ol style="list-style-type: none">1. Green Revolution was introduced by government of India in 1960s to 1970s to improve agriculture productivity.2. It started with the decision to adopt hayseeds and disease – resistance crops.3. Wheat is the main crop in this revolution.4. It enhanced agricultural improvement in the country.5. It aimed to increase food production and achieve self-sufficiency in grains, particularly wheat and rice.6. Led by M.S. Swaminathan in India, it helped reduce food scarcity and dependency on imports.7. The Green Revolution led to higher agricultural output, but it also caused soil degradation, water depletion, and increased regional disparities (benefiting Punjab, Haryana, and western UP more than other states).			<p><i>The student can write in a descriptive way also bringing the points together or can write only the points. If the student writes it in a descriptive way the evaluator should look how many points the student has brought in to the answer.</i></p>
Marking Scheme			
Defines Green Revolution and discusses it impact in Agriculture wit relevant points			4 Marks
Four points			4 Marks
Three points			3 Marks
Two points			2 Marks
One point			1 Mark
Irrelevant or no answer			0

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country’s economy, especially India		
Learning Outcome	Classifies and compares events, facts, data, and figures		
Marks	1 + 2		
Item stem	What is meant by transport? Considering India’s geographical diversity and economic needs, which mode of transport do you think is the most suitable for the country? Justify your answer.		
Expected Students Response			Marks
Transport refers to the movement of people and goods from one place to another using various modes like roadways, railways, airways, and waterways. In a country like India, there is a diverse set of people and means of transportation is very important. The most suitable means of transportation is railways because of the following reasons: <div><div>1.</div><div>A cheap means of transport, which are suitable for long distance travel for both passengers and freight.</div></div> <div><div>2.</div><div>Mining and agricultural development is also dependent on railways.</div></div> <div><div>3.</div><div>Railways are also instrumental in the cultural integration of the country.</div></div>			
Marking Scheme			
Defines the first part of the question and answers the second part of the question with suitable justification with more than one point.			3 Marks
Define the first question.			1 mark
Only answers which mode of transport as railways.			1 mark
Mention two opinions			2 marks
Mention one opinion			1 mark
Irrelevant or no response			0

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Geography
<i>Competency</i>	C-4.3 Draws inter-linkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife		
<i>Learning Outcome</i>	Explains cause and effect relationship between phenomena, events, and their occurrence		
<i>Marks</i>	4		
<i>Item stem</i>	Discuss about the challenges faced by farmers in India today?		
<i>Expected Students Response</i>			<i>Marks</i>
The challenges faced by the farmers today include stiff international competition, reduced investment by the government in agriculture, reduction of import duties on agricultural products. The reduction of subsidy on fertilizers has increased the expenses for farmers. Students can also bring in other factors like climate change, ground water depletion, cold storage shortage, transportation difficulties. So, any kind of relevant replies are expected here.			
<i>Marking Scheme</i>			
<i>Describes various factors faced by the farmers.</i>			<i>4 marks</i>
<i>Relevant with just 2 points</i>			<i>2 marks</i>
<i>Mentions only 1 point</i>			<i>1 Mark</i>
<i>Irrelevant or no response</i>			<i>0</i>

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Political Science
<i>Competency</i>	C-6.3 Analyses aspects of differential treatment or discrimination that may exist in Indian society, based on, e.g., socio-cultural background, region, language spoken, and what individuals and societies can do to eradicate such differential treatment		
<i>Learning Outcome</i>	Identifies assumptions, biases, prejudices, and stereotypes about various aspects		
<i>Marks</i>	2		
<i>Item stem</i>	Mention two consequences of gender discrimination in India.		2
<i>Expected Students Response</i>			<i>Marks</i>
The two consequences of gender discrimination in India are: 1. Gender division of labour 2. Primary task of home making 3. Limited Equal Opportunities 4. Employment Inequality 5. Health & Nutritional Disparities 6. Social & Political Exclusion 7. Violence & Exploitation 8. Any other Relevant responses			<i>Student can write any two points from the responses and other relevant responses which may not include here.</i>
<i>Marking Scheme</i>			
<i>Mention two points</i>			<i>2 marks</i>
<i>Mention one point</i>			<i>1 mark</i>
<i>Irrelevant or no response</i>			<i>0</i>

CR: 12

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	Geography
Competency	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Marks	2		
Item stem	Define renewable and Non-renewable resources.		
Marking Scheme (1+1 =2)			
Expected Students Response			Marks
Renewable Resources: They can be reproduced or replenish within a short period of time. Non-Renewable Resources: They are also called exhaustible resources; they are formed over millions of years.			
2 points mentioned			2 marks
1 point mentioned			1 mark
Irrelevant or no answer			0 mark

CR: 13

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Analyse	<i>Content Domain</i>	Geography
<i>Competency</i>	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them		
<i>Learning Outcome</i>	Analyses and evaluates information		
<i>Marks</i>	2 + 2		
<i>Item stem</i>	What were the key reasons behind the establishment of national parks, wildlife sanctuaries, and biosphere reserves in India? How do these protected areas contribute to biodiversity conservation and environmental sustainability?		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
The key reason for establishing national parks, wildlife sanctuaries, and biosphere reserves in India are to protect and conserve India's diverse flora and			<i>If the student writes according to the</i>

<p>fauna, their habitats, and maintain ecological balance, while also promoting sustainable development and supporting local communities.</p> <p>Alongwith it the student can bring various other reasons like:</p> <p>Conservation of Biodiversity: To protect endangered species and ecosystems from extinction and habitat destruction.</p> <p>Protection of Ecosystems: To conserve unique ecosystems such as forests, wetlands, and grasslands that are vital for ecological balance.</p> <p>Awareness and Education: To raise public awareness about the importance of wildlife and the need for conservation.</p> <p>Prevent Exploitation: To limit human intervention, hunting, and deforestation in sensitive areas.</p> <p>For the second part of the question these are few relevant points.</p> <p>Preserving Species: Protected areas safeguard endangered species and their natural habitats, ensuring their survival and reproduction.</p> <p>Ecological Balance: They maintain critical ecological processes like pollination, seed dispersal, and water purification.</p> <p>Tourism and Research: These areas promote eco-tourism and provide spaces for environmental research and education.</p> <p>Sustainable Development: Conservation ensures the long-term health of ecosystems, supporting sustainable agriculture, water resources, and climate regulation.</p>	<p><i>excepted response bringing two points the student should be awarded with 2 marks.</i></p> <p><i>These are few points, but any other relevant answers should be awarded accordingly.</i></p>
<i>Answers both part of the question with proper description.</i>	<i>4 Marks</i>
<i>Answers only the first part of the question</i>	<i>2 marks</i>
<i>Answers only the second part of the question</i>	<i>2 marks</i>
<i>Answers both part of the question but gives only one point in each part.</i>	<i>2 Marks</i>
<i>Answers only one part with relevant point</i>	<i>1 Mark.</i>

CR: 14

Class	10	Subject	Social Science
Cognitive level	Analyse	Content Domain	Geography
Competency	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them		
Learning Outcome	Analyses and evaluates information		
Marks	2		
Item stem	"Explain two key factor that contributes to the vast diversity of flora and fauna in India."		
Marking Scheme			
Expected Students Response			Marks
India’s geographical location within the tropical latitudes, influences of monsoon winds with well distributed rainfall and the fertile soil favour the existing of a great variety of flora and fauna.			
2 points mentioned			2 mark
1 point mentioned			1 mark
Irrelevant or no answer			0 mark

CR: 15

Class	10	Subject	Social Science
Cognitive level	Apply	Content Domain	Geography
Competency	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them		
Learning Outcome	Analyses and evaluates information		
Marks	3		
Item stem	Based on the light of “Forest and wildlife resources” chapter in your textbook, formulate your own description of forest.		
Marking Scheme (1)			
Expected Students Response			Marks
			The student can give

A forest is a vast natural ecosystem dominated by trees, shrubs, and various plant species, providing habitat for diverse wildlife. It plays a crucial role in maintaining ecological balance by regulating climate, conserving soil, and supporting the water cycle. Forests also serve as a source of livelihood for many communities and contribute to biodiversity by nurturing countless species of flora and fauna. They act as the "lungs of the Earth" by absorbing carbon dioxide and releasing oxygen, making them essential for sustaining life on our planet.	<i>various responses in his description. A sample response is given here. Based on this idea and from the chapter the evaluators should give marks accordingly</i>
<i>If the student gives a description of forest bringing in element from the chapter and what he understands by forest with more than 2 points</i>	3 Marks
<i>If the student gives a description of forest bringing in element from the chapter and what he understands by forest with 2 points</i>	2 Marks
<i>If the student gives a description of forest bringing in element from the chapter and what he understands by forest with 1 point</i>	1 Mark

CR: 16

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Evaluation	<i>Content Domain</i>	History
<i>Competency</i>	C-2.4 Explains the growth of new ideas and practices across the world (including humanism, mercantilism, industrialisation, scientific developments and explorations, imperialism, colonialism, the rise of new nation-states across the world, and various technologies including the most current) and how they affected the course of world history		
<i>Learning Outcome</i>	Analyses and evaluates information		
<i>Marks</i>	5		
<i>Item stem</i>	Evaluate the factors that hindered the growth of German nationalism between 1815 and 1850 and analyse their impact on the unification process.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
The slow progress of German nationalism between 1815 and 1850 can be attributed to several political, social, and economic factors that hindered unification efforts. 1. Fragmentation of the German Confederation: <ul style="list-style-type: none">○ After the Congress of Vienna (1815), Germany was divided into 39 independent states under the German Confederation.○ Austria and Prussia, the two dominant states, had conflicting interests, preventing unified leadership. 2. Austrian Dominance and Suppression: <ul style="list-style-type: none">○ Austria, under Chancellor Metternich, opposed nationalism and			

<p>liberalism.</p> <ul style="list-style-type: none"> ○ The Carlsbad Decrees (1819) censored nationalist ideas and restricted freedom of speech, suppressing movements for unification. <p>3. Lack of a Common Identity:</p> <ul style="list-style-type: none"> ○ Linguistic, cultural, and economic differences among the German states slowed the formation of a collective national identity. ○ The influence of local rulers and religious divisions further weakened nationalist sentiments. <p>4. Economic Barriers and Slow Industrial Growth:</p> <ul style="list-style-type: none"> ○ The German states had different currencies, trade policies, and economic structures, making economic unity difficult. ○ However, the formation of the Zollverein (1834), a customs union led by Prussia, was a significant step toward economic integration. <p>5. Failure of the 1848 Revolutions:</p> <ul style="list-style-type: none"> ○ The Revolutions of 1848, driven by liberal and nationalist aspirations, failed due to lack of coordination and opposition from conservative forces. ○ The Frankfurt Parliament's attempt to unify Germany under a constitutional monarchy collapsed when King Frederick William IV of Prussia rejected the crown. <p>Impact on Unification:</p> <p>Although German nationalism made little progress during this period, some foundational changes—such as economic integration through the Zollverein—laid the groundwork for future unification. The failure of the 1848 revolution demonstrated that nationalism alone was insufficient; military and political strategies would later be crucial in Germany's eventual unification under Prussia in 1871.</p>	
<i>If the Student responds any 3 point and describes the impact on Unification</i>	<i>5 marks</i>
<i>If the Student responds only to the first part of the question with at least 3 points</i>	<i>3 marks</i>
<i>If the student responds only to the second part of the question correctly</i>	<i>2 marks</i>
<i>If the student responds with 2 points to the first part and correctly to the second part.</i>	<i>4 marks</i>
<i>If the student gives only one response to the first part and does not give response to the second part</i>	<i>1 mark</i>
<i>Partly correct answer to the second part</i>	<i>1 mark</i>

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country's economy, especially India		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Marks	5		
Item stem	Explain the significance of the service sector in India's economy and its contribution to development.		

Marking Scheme

Expected Students Response	Marks
<p>The service sector, also known as the tertiary sector, plays a crucial role in India's economic growth and development. Over the years, it has become the largest contributor to the country's GDP and a major source of employment. Some of the major contributions are:</p> <ol style="list-style-type: none"> 1. Major Contribution to GDP 2. Employment Generation 3. Boost to Global trade 4. Infrastructure and Urbanisation 5. Support to other Sectors 6. Role in Digital and Financial Inclusion <p>The service sector has transformed India's economy by contributing significantly to GDP, employment, and trade. With advancements in technology and globalization, it is expected to remain a key driver of growth in the coming years.</p>	
<i>The student explains the significance and gives minimum 3 points about contribution.</i>	<i>5 marks</i>
<i>The student explains the significance and gives minimum 2 points about contribution.</i>	<i>4 marks</i>
<i>The student explains the significance and gives minimum 1 point about contribution.</i>	<i>3 marks</i>
<i>The student only explains the significance and do not respond to the contribution</i>	<i>2 marks</i>
<i>The student only explains the significance partially and do not respond to the contribution</i>	<i>1 mark</i>
<i>The student does not explain the significance and writes 3 points on contribution</i>	<i>3 marks</i>

<i>The student does not explain the significance and writes 2 points on contribution</i>	2 marks
<i>The student does not explain the significance and writes 1 point on contribution</i>	1 mark

CR: 18

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	History
<i>Competency</i>	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
<i>Learning Outcome</i>	Explains cause and effect relationship between phenomena, events, and their occurrence		
<i>Marks</i>	2		
<i>Item stem</i>	What was the Dutt-Bradley formula?		
<i>Marking Scheme (2)</i>			
<i>Expected Students Response</i>			<i>Marks</i>
The Communist Party joined the Indian National congress by Ben Bradley-RP Dutt Formula, according to which the National Congress could play a great part and a foremost part in realizing the anti-imperialist people front. This formula recognized the Congress as a nationalist force and suggested that the Communist Party work alongside it to advance progressive policies and strengthen the movement against imperialism.			
<i>The student responds with proper description</i>			<i>2 marks</i>
<i>The student responds with partial description</i>			<i>1 mark</i>
<i>Irrelevant or no answer</i>			<i>0 mark</i>

CR: 19

Class	10	Subject	Social Science
Cognitive level	Apply	Content Domain	Economics
Competency	C-8.2 Understands and analyses the concepts and practice of the range of economic systems – from free market to entirely state-controlled markets		
Learning Outcome	Analyses and evaluates information		
Marks	2		
Item stem	Suppose you purchased a computer set for Rs. 30,000 and received a cash memo/receipt. Later, you realized that the price you paid was higher than the Maximum Retail Price (MRP). How would you address this issue?"		
Marking Scheme			
Expected Students Response			Marks
1. Go to the Shopkeeper and request a refund for the excess amount charged. If the shopkeeper refuses one could file a complaint with the consumer helpline or the Department of Consumer affairs. 2. If the Shopkeeper ignores the complaint, submit a complain at District Level Consumer Court which can deal the cases involving claims up to Rs 1 to Rs 20 lakh.			
2 points mentioned			2 marks
1 point mentioned			1 mark
Irrelevant or no answer			0 mark

CR: 20

Class	10	Subject	Social Science
Cognitive level	Analyse	Content Domain	History
Competency	C-2.4 Explains the growth of new ideas and practices across the world (including humanism, mercantilism, industrialisation, scientific developments and explorations, imperialism, colonialism, the rise of new nation-states across the world, and various technologies including the most current) and how they affected the course of world history		
Learning Outcome	Analyses and evaluates information		
Marks	4		
Item stem	How did the Industrial Revolution in Europe negatively impacted Indian industries? Explain.		
Marking Scheme (2)			

<i>Expected Students Response</i>	<i>Marks</i>
<p>The Industrial Revolution in Europe had a significant negative impact on Indian industries, particularly traditional handicrafts and textiles in following way.</p> <ol style="list-style-type: none"> Decline of Indian Handicrafts: <ul style="list-style-type: none"> Before the Industrial Revolution, India was a major producer of high-quality textiles. With the advent of mechanized production in Britain, cheaper machine-made goods flooded the Indian market, leading to the decline of traditional artisans and weavers. British Policies and Deindustrialization: <ul style="list-style-type: none"> The British colonial policies favoured British industries over Indian production. Heavy import duties were placed on Indian goods in Britain, while British products were allowed in India duty-free, making Indian textiles less competitive. Loss of Market and Raw Material Exploitation: <ul style="list-style-type: none"> India, once an exporter of finished textiles, was reduced to a supplier of raw materials like cotton for British factories. British industries used Indian cotton to produce textiles, which were then sold back in India at higher prices. Destruction of Self-Sufficient Economy: <ul style="list-style-type: none"> The traditional village economy of India, which depended on handicrafts and small-scale industries, was severely affected. Many artisans and craftsmen lost their livelihood, forcing them to work as labourers in agriculture or British-owned industries. <p>Any other relevant points.</p>	<p><i>In this question the student can elaborate the points, or they can just write down the relevant points. If someone just write down the points, then the evaluator should give marks accordingly. Moreover, for each point certain sub points are also given. In case sub points are use as responses, those should also be considered as correct responses.</i></p>
<i>4 points mentioned</i>	<i>4 marks</i>
<i>3 points mentioned</i>	<i>3 marks</i>
<i>2 points mentioned</i>	<i>2 marks</i>
<i>1 point mentioned</i>	<i>1 mark</i>

Class	10	Subject	Social Science
Cognitive level	Analyse	Content Domain	Disaster Management
Competency	C-4.3 Draws inter-linkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife		
Learning Outcome	Analyses and evaluates information		
Marks	2		
Item stem	A strong earthquake with a magnitude of 6.9 struck southwestern Japan on January 13, 2025, prompting tsunami warnings, according to the country’s Meteorological Agency. Given this context, can a similar disaster be related to Mizoram? Provide one reason. Additionally, suggest one way the people of Mizoram can prepare for a possible earthquake.		
Marking Scheme			
Expected Students Response			Marks
<p><i>Yes, the same can happen in Mizoram as it lies in the Seismic Zone V.</i></p> <p><i>Suggestions for the people of Mizoram:</i></p> <p><i>1) The building codes by the authorities should be strictly enforced and followed.</i></p> <p><i>2) Light materials should be used for building houses.</i></p> <p><i>3) Quake resistant construction pattern should be followed.</i></p> <p><i>4) Insurance scheme should be encouraged.</i></p> <p><i>5) Regular earthquake drills should be carried out.</i></p> <p><i>6) They should be aware to take precautionary measures before and after the earthquake.</i></p>			
2 points mentioned			2 marks
2 unclear or partially correct answer			1.5 mark
1 point mentioned			1 mark
1 unclear or partially correct answer			0.5 mark
Irrelevant or no answer			0 mark

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Disaster Management
<i>Competency</i>	C-4.3 Draws inter-linkages between various components of the physical environment, such as climate and relief, climate and vegetation, vegetation, and wildlife		
<i>Learning Outcome</i>	Analyses and evaluates information		
<i>Marks</i>	2		
<i>Item stem</i>	A girl is trapped under a collapsed building after an earthquake, and a rescue operation is underway. Mention two important precautions to take before entering the damaged building for rescue.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
1) Be careful and see carefully the construction of the building and collapsed portions. 2) Check carefully and see whether the walls need any support. 3) Be alert about the possible hazards, which can occur from weak structures. 4) Wear protective gear such as helmets, gloves, and masks to avoid injury from falling debris, dust, or sharp objects. 5) Carry essential rescue tools like flashlights and ropes.			
<i>2 points mentioned</i>			<i>2 mark</i>
<i>2 unclear or partially correct answer</i>			<i>1.5 mark</i>
<i>1 point mentioned</i>			<i>1 mark</i>
<i>1 unclear or partially correct answer</i>			<i>0.5 mark</i>
<i>Irrelevant or no answer</i>			<i>0 mark</i>

Class	10	Subject	Social Science
Cognitive level	Remember	Content Domain	History
Competency	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
Learning Outcome	Recognises and retrieves facts, figures, and narrate processes		
Marks	1		
Item stem	What was the primary goal of Swadeshi movement?		
Marking Scheme			
Expected Students Response			Marks
To promote the use of indigenous goods and boycott British products, fostering economic self-reliance and national pride as a path toward political independence			<i>If any student writes only as ‘to promote the use of indigenous goods and boycott British products’ then also mark should be given</i>
<i>Responds with use of indigenous goods and boycott British products, fostering economic self-reliance and national pride as a path toward political independence</i>			<i>1 mark</i>
<i>Responds with only use of indigenous goods and boycott British products</i>			<i>1 mark</i>
<i>Responds with either use of indigenous goods or boycott of British products</i>			<i>0.5 mark</i>

Class	10	Subject	Social Science
Cognitive level	Apply	Content Domain	History
Competency	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Marks	2		
Item stem	How did the Swadeshi Movement help in promoting local industries?		
Marking Scheme			
Expected Students Response			Marks
<p>The Swadeshi Movement encouraged people to boycott British goods and use Indian-made products instead. This increased demand for local goods, which led to the growth of Indian industries. Indian entrepreneurs and craftsmen were motivated to produce more, leading to self-reliance and economic nationalism.</p> <p>Boycott of foreign goods – People stopped using British products, reducing their demand.</p> <p>Support for Indian products – Indians started buying locally made goods, increasing demand for them.</p> <p>Growth of Indian industries – Local businesses and industries expanded to meet the rising demand.</p> <p>Encouragement to artisans and entrepreneurs – Indian producers, craftsmen, and entrepreneurs were motivated to produce more.</p> <p>Promotion of self-reliance – The movement inspired economic independence and national pride.</p>			<p><i>The student can write it in descriptive way or can simply give points.</i></p>
2 points mentioned			2 mark
1 point mentioned			1 mark
Irrelevant or no answer			0 mark

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	History
Competency	C-3.2 Identifies and analyses important phases of the Indian national freedom struggle against British colonial rule, with special reference to the movement led by Mahatma Gandhi and other important figures as well as those that led to independence, and understands the specific Indian concepts, values and methods (such as Swaraj, Swadeshi, passive resistance, fight for dharma, self-sacrifice, ahimsa) that played a part in achieving Independence		
Learning Outcome	Explains cause and effect relationship between phenomena, events, and their occurrence		
Marks	4		
Item stem	Explain how the press played an important role in spreading nationalist ideas during the national movement.		
Marking Scheme			
Expected Students Response			Marks
Created national awareness – Newspapers and journals helped spread ideas of freedom, unity, and patriotism among the masses. Highlighted colonial injustices – The press exposed British policies, economic exploitation, and repressive laws, making people aware of colonial rule's impact. Connected leaders and people – Writings by national leaders in newspapers helped bridge the gap between political leaders and the common people. Encouraged participation – The press inspired people to join protests, movements, and public meetings by reporting on nationalist activities. Faced repression bravely – Despite strict censorship and British suppression, many newspapers continued to support the freedom struggle. Any other relevant point.			<i>The student can answer from the expected response. However, in the context of the question there might be other relevant answers also.</i>
4 points mentioned			4 marks
3 points mentioned			3 marks
2 points mentioned			2 marks
1 point mentioned			1 mark

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Economics
<i>Competency</i>	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country’s economy, especially India		
<i>Learning Outcome</i>	Analyses and evaluates information		
<i>Marks</i>	2		
<i>Item stem</i>	Vanlalzawma lives in a village in Mizoram and cultivates maize on his farmland. He recently set up a small unit to process the maize into flour and supplies it to a bakery in Aizawl that makes and sells maize-based snacks. Identify the economic sectors Vanlalzawma is involved in.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
<p>Primary Sector – Cultivating maize is part of the primary sector, as it involves using natural resources.</p> <p>Secondary Sector – Processing maize into flour in his unit is a manufacturing activity, which falls under the secondary sector.</p> <p>Tertiary Sector – Supplying the flour to the bakery in Aizawl involves trade and transport, which are part of the tertiary sector.</p> <p>.</p>			
<i>3 points mentioned</i>			<i>3 marks</i>
<i>2 points mentioned</i>			<i>2 marks</i>
<i>1 point mentioned</i>			<i>1 mark</i>
<i>Irrelevant or no answer</i>			<i>0 mark</i>

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Analyse	<i>Content Domain</i>	Geography
<i>Competency</i>	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation		
<i>Learning Outcome</i>	Classifies and compares events, facts, data, and figures		
<i>Marks</i>	3		
<i>Item stem</i>	India depends heavily on coal and petroleum for energy needs, but there is also a growing focus on solar and wind energy. Analyse the reasons why India should reduce its dependence on conventional energy sources and promote non-conventional ones.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
Limited reserves – Coal and petroleum are exhaustible resources and may not last long due to overuse. Environmental concerns – Burning fossil fuels causes air pollution and greenhouse gas emissions, leading to climate change. Sustainable development – non-conventional sources like solar and wind are renewable and eco-friendly, making them better for the environment. Energy security – Relying on renewable sources reduces import dependence and increases energy security for the future. Employment and innovation – Developing renewable energy can create new jobs and boost technological advancement in India.			
<i>3 points mentioned</i>			<i>3 marks</i>
<i>2 points mentioned</i>			<i>2 marks</i>
<i>1 point mentioned</i>			<i>1 mark</i>
<i>Irrelevant or no answer</i>			<i>0 mark</i>

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Geography
<i>Competency</i>	C-4.6 Develops sensitivity towards the judicious use of natural resources (by individuals, societies, and nations) and suggests measures for their conservation		
<i>Learning Outcome</i>	Classifies and compares events, facts, data, and figures		
<i>Marks</i>	2		
<i>Item stem</i>	Differentiate between renewable and non-renewable resources with examples.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
Renewable resources are those that can be replenished naturally over time. <ul style="list-style-type: none"><i>Example:</i> Solar energy, wind energy, forests. Non-renewable resources are those that cannot be renewed or take millions of years to form. <ul style="list-style-type: none"><i>Example:</i> Coal, petroleum, natural gas.			
<i>Differentiates between renewable and Non-renewable energy with examples</i>			<i>2 marks</i>
<i>Only Differentiate between renewable and Non-renewable energy without examples</i>			<i>1 mark</i>
<i>Both example of renewable and Non-renewable energy given without the differentiation</i>			<i>1 mark</i>
<i>Only one example given</i>			<i>0.5 mark</i>

Class	10	Subject	Social Science
Cognitive level	Evaluate	Content Domain	Political Science
Competency	C-6.1, forms of inequality, injustice, and discrimination have occurred in different sections of society at different times (due to internal as well as outside forces such as colonisation), leading to political, social, and cultural efforts, struggles, movements, and mechanisms at various levels towards equity, inclusion, justice, and harmony, with varying outcomes and degrees of success		
Learning Outcome	Identifies assumptions, biases, prejudices, and stereotypes about various aspects		
Marks	3		
Item stem	Do you think reserving seats for women in the Indian Parliament is necessary for achieving gender equality in politics? Give your opinion with valid arguments.		
Marking Scheme			
Expected Students Response			Marks
<p>Yes, reserving seats for women is necessary, because:</p> <p>Low representation – Women make up half of the population but have very little representation in Parliament and state assemblies.</p> <p>Social barriers – Many women face social and cultural restrictions that prevent them from entering politics.</p> <p>Inclusive democracy – Reservation helps create a more representative and balanced democracy.</p> <p>Role models – Women leaders can inspire others and raise issues that directly affect women.</p> <p>Other relevant points.</p> <p>(Moreover, though certain points are given as expected response it is advisable to the evaluators that if students do not write exactly the above points, but they capture the essence of the responses marks should be awarded)</p>			<p><i>In this question some may argue against the idea of reserving seats for women bringing in arguments like merit and the de-merits of reservation but in principle reservation is necessary for women representation.</i></p>
3 points mentioned			3 marks
2 points mentioned			2 marks
1 point mentioned			1 mark
Irrelevant or no answer			0 mark

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.3 Distinguishes between ‘unorganised’ and ‘organised’ sectors of the economy and their role in production for the local market in small, medium, and large-scale production centres (industries), and recognises the special importance of the so-called ‘unorganised’ sector in Indian economy and its connections with the self-organising features of Indian society		
Learning Outcome	Analyses and evaluates information		
Marks	2		
Item stem	Discuss the difference between formal and informal sector financial institutions.		
Marking Scheme (2)			
Expected Students Response			Marks
<p>1) <i>Formal Sector Institution: Formal Sector Institutions are the financial institution which exist in the organised sector. This category includes all those financial institutions where activities are systematically coordinated and regulated by the RBI, which is the central Bank of the country. These institutions are integrated.</i></p> <p>2) <i>Informal Sector Institution: Which exist in the unorganised sector. This categories include all those financial institution whose activities are not systematically coordinated and regulated by the RBI. Those institution are not integrated with each other.</i></p>			
Discuss both the formal and informal sector			2 marks
Discuss only one sector			1 mark
Irrelevant or no answer			0 mark

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.3 Distinguishes between ‘unorganised’ and ‘organised’ sectors of the economy and their role in production for the local market in small, medium, and large-scale production centres (industries), and recognises the special importance of the so-called ‘unorganised’ sector in Indian economy and its connections with the self-organising features of Indian society		
Learning Outcome	Analyses and evaluates information		
Marks	4		
Item stem	What is the difference between formal and informal sources of credit? Why is it safer to take loans from formal financial institutions?		
Marking Scheme			
Expected Students Response			Marks
Formal sources of credit include banks and cooperatives. They are regulated by the Reserve Bank of India (RBI) and follow legal procedures. Informal sources of credit include moneylenders, traders, employers, friends, and relatives. They are not regulated and often charge high interest rates. Why formal sources are safer: <ul style="list-style-type: none">• They charge reasonable interest rates.• There is transparency and legal protection for borrowers.• Borrowers are less likely to fall into debt traps.			
States the difference between formal source of credit and informal source of credit and give two reason why formal sources are safer			4 marks
Does not state the difference but defines one formal source of credit or informal source of credit with two reasons why formal sources are safer			3 marks
States the difference between formal source of credit and informal source of credit but do not provide response why it is safer			2 marks
Only define formal source of credit or informal source of credit without any response to the second part of the question			1 mark
Does not give response to the first part of the question but give two responses to why formal sector is safer			2 marks
Does not give response to the first part of the question but give one response to why formal sector is safer			1 mark

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Analyse	<i>Content Domain</i>	Economics
<i>Competency</i>	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country’s economy, especially India		
<i>Learning Outcome</i>	Analyses and evaluates information		
<i>Marks</i>	2		
<i>Item stem</i>	Why is the classification of economic activities into primary, secondary, and tertiary sectors important for understanding the structure of the economy?		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
<p>Helps understand economic development – By analysing sector-wise growth, we can see whether a country is moving from agriculture (primary) to industry (secondary) and then to services (tertiary).</p> <p>Policymaking becomes easier – The government can plan targeted schemes (e.g., MGNREGA for rural employment in the primary sector or skill development for tertiary jobs).</p> <p>Identifies employment trends – It shows how many people are working in each sector and whether employment is increasing in proportion to output.</p> <p>Highlights imbalances – For example, a large number of people work in agriculture, but it contributes less to GDP. This indicates underemployment.</p> <p>Any other relevant responses</p>			
<i>4 points mentioned</i>			<i>4 marks</i>
<i>3 points mentioned</i>			<i>3 marks</i>
<i>2 points mentioned</i>			<i>2 marks</i>
<i>1 point mentioned</i>			<i>1 mark</i>
<i>Irrelevant or no answer</i>			<i>0 mark</i>

CR: 33

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Geography
<i>Competency</i>	C-4.5 Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them		
<i>Learning Outcome</i>	Explains cause and effect relationship between phenomena, events, and their occurrence		
<i>Marks</i>	2		
<i>Item stem</i>	What is a thermal power plant and how power is generated in a thermal power plant?		
<i>Marking Scheme (2)</i>			
<i>Expected Students Response</i>			<i>Marks</i>
<i>A thermal power plant is a place where heat energy is converted into electrical energy.</i> <i>Thermal power is generated by using coal, petroleum or natural gas.</i>			
<i>2 points mentioned</i>			<i>2 mark</i>
<i>1 point mentioned</i>			<i>1 mark</i>
<i>Irrelevant or no answer</i>			<i>0 mark</i>

CR: 34

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Political Science
<i>Competency</i>	C-5.4 Analyses the basic features of a democracy and democratic government – and its history in India and across the world – and compares this form of government with other forms of government		
<i>Learning Outcome</i>	Explains cause and effect relationship between phenomena, events, and their occurrence		
<i>Marks</i>	5		
<i>Item stem</i>	India has adopted a federal system of government to accommodate its diversity. Do you think federalism has strengthened democracy in India? Support your answer with suitable arguments.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>

<p>Yes, federalism has strengthened democracy in India in the following ways:</p> <ol style="list-style-type: none"> 1. Accommodation of diversity – Federalism allows different regions, languages, and cultures to coexist peacefully with their own governments. 2. Decentralisation of power – Powers are shared between the central and state governments, preventing the concentration of power. 3. Promotion of local governance – The 73rd and 74th Amendments have empowered local bodies (Panchayats and Municipalities), improving grassroots democracy. 4. Representation of regional interests – States can frame their own laws on certain subjects, allowing them to address region-specific needs. 5. Unity with integrity – Federalism helps maintain national unity while respecting regional autonomy, which is crucial in a diverse country like India. 6. Any other relevant responses. 	
5 points mentioned	5 marks
4 points mentioned	4 marks
3 points mentioned	3 marks
2 points mentioned	2 marks
1 point mentioned	1 mark
0.5 mark can be given for incomplete responses.	

CR: 35

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Understand	<i>Content Domain</i>	Economics
<i>Competency</i>	C-7.2 Evaluates the importance of the three sectors of production (primary, secondary, and tertiary) in any country’s economy, especially India		
<i>Learning Outcome</i>	Constructs views, arguments, and ideas on the basis of collected or given information		
<i>Marks</i>	3		
<i>Item stem</i>	How can the government help improve employment opportunities in India through education and financial support? Explain with examples.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>

<p>Providing quality education – When citizens receive good education and skills, they become more employable in various sectors. Example: Opening more government schools and colleges.</p> <p>Financial aid to students – Scholarships and free textbooks help students from poor families complete their education. Example: Government schemes that support higher education for economically weaker sections.</p> <p>Support for self-employment – Easy and low-interest loans help people start small businesses or work independently. Example: Providing loans to open tailoring shops, food stalls, or workshops. Any other relevant point.</p>	<p><i>While evaluating, the evaluator should see whether the responses contain examples or not.</i></p>
3 responses given	3 marks
2 responses given	1.5 marks
1 response given	1 mark
Irrelevant or no answer	0 mark

CR: 36

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Economics
Competency	C-7.3 Distinguishes between ‘unorganised’ and ‘organised’ sectors of the economy and their role in production for the local market in small, medium, and large-scale production centres (industries), and recognises the special importance of the so-called ‘unorganised’ sector in Indian economy and its connections with the self-organising features of Indian society		
Learning Outcome	Interprets		
Marks	2		
Item stem	Distinguish between paper money and deposit money.		
Marking Scheme (2)			
Expected Students Response			Marks
<p>1. Paper money refers to physical bank notes issued by a government, which you can use for transaction while deposit money is the money stored in a bank account, existing only as a digital record and accessible through cheque or electronic transfer.</p> <p>2. Paper money is a form of money that can be touched and used to settle debts whereas deposit money is a form of money that exist in bank accounts as digits and cannot be touched.</p>			

3. Paper money is the traditionally notes that people used to carry in the form of cash while deposit money is a form of money only seen in accounts in the form of digits and it cannot be touched physically.	
2 points mentioned	2 mark
1 point mentioned	1 mark
Irrelevant or no answer	0 mark

CR: 37

Class	10	Subject	Social Science
Cognitive level	Evaluate	Content Domain	Economics
Competency	C-7.3 Distinguishes between ‘unorganised’ and ‘organised’ sectors of the economy and their role in production for the local market in small, medium, and large-scale production centres (industries), and recognises the special importance of the so-called ‘unorganised’ sector in Indian economy and its connections with the self-organising features of Indian society		
Learning Outcome	Interprets		
Marks	5		
Item stem	Do you think deposit money is more useful than paper money in today's economy? Evaluate with suitable arguments.		
Marking Scheme			
Expected Students Response			Marks
<p>Yes, deposit money is more useful than paper money in many ways:</p> <ol style="list-style-type: none">1. Convenience – Deposit money (in banks) allows for digital transactions, online payments, and ATM withdrawals, which are safer and faster than carrying cash.2. Security – Keeping money in banks reduces the risk of theft or loss, while paper money can be easily lost or stolen.3. Access to credit – People with bank deposits can access loans and interest, which is not possible with physical cash.4. Record-keeping and transparency – Digital use of deposit money leaves a traceable record, which helps in better financial planning and reduces corruption.5. Any other relevant point. <p>However, we cannot say that the days of paper money are over. There is a large section of people in our country who lives in remote areas who are still to be brought in under the ambit of banking service. Moreover, the internet connection also plays a major role in the use of paper money.</p>			
4 points mentioned on the usefulness of deposit money along with a concluding remark on the paper money or bringing the importance of paper			5 marks

<i>money also</i>	
<i>4 points mentioned on the usefulness of deposit money</i>	<i>4 marks</i>
<i>3 points mentioned on the usefulness of deposit money</i>	<i>3 marks</i>
<i>2 points mentioned on the usefulness of deposit money</i>	<i>2 marks</i>
<i>1 point mentioned on the usefulness of deposit money</i>	<i>1 mark</i>
<i>Irrelevant or no answer</i>	<i>0 mark</i>

CR: 38

Class	10	Subject	Social Science
Cognitive level	Understand	Content Domain	Political Science
Competency	C-5.1 Understands that the Indian Constitution draws from the great cultural heritage and common aspirations of the Indian nation, and recalls India’s early experiments with democracy		
Learning Outcome	Classifies and compares events, facts, data, and figures		
Marks	2		
Item stem	What are the two key principles that guide a democratic government? Briefly explain their importance.		
Marking Scheme			
Expected Students Response			Marks
Political equality – In a democracy, every citizen has equal rights to vote and participate in decision-making, regardless of their background. Accountability and transparency – A democratic government is answerable to the people, and decisions are made openly, often through public discussion and debate. Any other relevant response.			
2 points mentioned and explain their importance			2 marks
1 point mentioned with explain the importance			1 mark
2 points mentioned but explained the significance of only one point.			1.5 marks
Irrelevant or incorrect response			0 mark

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Analyse	<i>Content Domain</i>	Political Science
<i>Competency</i>	Critically evaluates the impact of human interventions on the environment, including climate change, pollution, shortages of natural resources (particularly water), and loss of biodiversity; identifies practices that have led to these environmental crises and the measures that must be taken to reverse them		
<i>Learning Outcome</i>	Explains cause and effect relationship between phenomena, events, and their occurrence		
<i>Marks</i>	2		
<i>Item stem</i>	How did the use of HYV seeds during the Green Revolution affect food production and regional inequality in India?		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
Increased food production – HYV seeds led to a significant rise in crop yields, especially in wheat and rice. Regional inequality – Only regions with good irrigation and resources, like Punjab and Haryana, benefited, while others lagged behind. Other relevant points			
<i>2 points mentioned</i>			<i>2 marks</i>
<i>1 point mentioned</i>			<i>1 mark</i>
<i>Unclear but brings the essence</i>			<i>1.5 marks</i>
<i>Irrelevant or incorrect response</i>			<i>0 mark</i>

<i>Class</i>	10	<i>Subject</i>	Social Science
<i>Cognitive level</i>	Apply	<i>Content Domain</i>	Political Science
<i>Competency</i>	Analyses the basic features of a democracy and democratic government – and its history in India and across the world – and compares this form of government with other forms of government		
<i>Learning Outcome</i>	Analyses and evaluates information		
<i>Marks</i>	2		
<i>Item stem</i>	A law related to education passed by the central government is being opposed by several state governments, claiming that it infringes upon their authority. Using your understanding of the federal structure of the Indian Constitution, explain whether the states have a right to raise such concerns and why.		
<i>Marking Scheme</i>			
<i>Expected Students Response</i>			<i>Marks</i>
Education is a subject in the Concurrent List. So, States has a right to claim that it infringes upon their authority. both the Centre and States can make laws on it, but in case of conflict, central law prevails—however, states can voice concerns to protect their autonomy.			
<i>2 points mentioned</i>			<i>2 marks</i>
<i>1 point mentioned</i>			<i>1 mark</i>
<i>Unclear but brings the essence</i>			<i>1.5 marks</i>
<i>Irrelevant or incorrect response</i>			<i>0 mark</i>