

MIZORAM BOARD OF SCHOOL EDUCATION  
AIZAWL — 796 012

Dated Aizawl, the 18<sup>th</sup> August, 2021

NOTICE

No. K.11012/1/2018-MBSE(Acad)/116 : It is hereby notified for the information of all concerned that **week-wise plans** for students at the higher secondary stage have been prepared by MBSE for the 2021 – 2022 academic session in view of the restriction on opening of schools due to the COVID – 19 pandemic so that students can receive school education systematically at home till schools re-open for normal classes. The week-wise plans are prepared from week 17 onwards and are to be carried out **under the guidance of the lecturers** through available technological and social media tools. The lecturers should give tests/assignments/project work etc. and may make use of audiovisual aids. However, the week wise plans must be implemented in such a way so as not to overburden the students. The assessments will be done by the schools internally and will be taken into consideration for the students' internal marks.

Sd/- LALTHANGBIKA

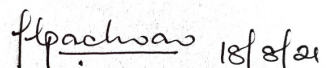
Secretary


Mizoram Board of School Education

Memo No. K.11012/1/2018-MBSE(Acad)/116 (A) : Dated Aizawl, the 18<sup>th</sup> August , 2021

Copy to : —

1. P.S. to Minister for information of Hon'ble Minister, School Education Department, Mizoram.
2. Mr. L.Thangmawia, MLA, Vice Chairman, HRD Board, Mizoram.
3. The Secretary to the Govt. of Mizoram, School Education Department, Aizawl.
4. P.S. to Chairman, MBSE for information of the Chairman.
5. P.A. to Secretary, MBSE for information of the Secretary.
6. The Director of School Education, Govt. of Mizoram, Aizawl, for information.
7. All District Education Officers, Mizoram. They are requested to disseminate this Notice and ensure compliance by all schools within their respective jurisdictions.
8. All Principals of Higher Secondary Schools in Mizoram. They are hereby informed to follow and implement the week-wise plans prepared by the Board, as annexed, in this Notice.
9. The General Secretary, HISSLAM, with a request to disseminate to their member schools.
10. Guard File No. 14.

  
(SARAH LALENGZAMI PACHUAU)  
Director (Academic)

 Mizoram Board of School Education

## **FOREWORD**

The week-wise plans consist of interesting and challenging activities taken from the textbooks prescribed by MBSE. Most of the activities given in the week-wise plans focus on learning outcomes and can thus be achieved through any resource including the textbooks the students are using. The purpose of mapping of themes with learning outcomes in the week-wise plans is to facilitate lecturers to assess the students' progress in learning and also to go beyond textbooks. This will empower our students, lecturers, school principals and parents to find out positive ways to deal with the COVID – 19 pandemic using *on-line teaching – learning* resources and in the attainment of learning outcomes.

The Board has observed that many students may not have internet facilities in their mobile phones, or may not be able to use different social media tools such as whatsapp, facebook, twitter, google, etc., or may have poor internet connectivity. The lecturers are therefore expected to guide students and parents through SMS on mobile phones or through voice calls.

The week-wise plans will enable students to engage themselves meaningfully in their studies during their stay at home until schools re-open for normal classes. Moreover, these week-wise plans will be useful for parents also in creating a conducive learning environment at home for their children so that they can learn in a meaningful and joyful way.

The Board has developed strategies for implementing the week-wise plans for learning of students at the higher secondary stage which is appended overleaf.

## **Strategies for implementing week-wise plans for students at the Higher Secondary Stage.**

1. The lecturers are advised to encourage the students/guardians and to inform them about the conduct of the suggested activities and also the reason for preparing the week-wise plans.
2. Clear and sufficient verbal and visual instructions are to be given by lecturers so that the students are able to follow the activities suggested.
3. The lecturers may encourage students to carry out self –study, reading and learning with available resources at home under the supervision of parents.
4. The lecturers may highlight only important points in each topic and the rest of the activities may be done by the students themselves. More focus should be on helping students becoming self-learners.
5. The lecturers may create WhatsApp groups for different classes or subjects to ingest learning of the topic with brief explanations. This can be done as per the need of the situation.
6. Lecturers can explain to the students / parents about each activity over the phone, through SMS and voice recorded messages. The lecturer must continuously ensure that the activities have been conducted by each and every student.
7. For any concept/topic, the lecturers in the group may ask students to go through a particular portion of the chapter/activity. This may help lecturers to know their students thought process and may also observe that the students are progressing in activity.
8. Lecturers should try their level best to ensure that the learner is willingly and enthusiastically doing the activities. The parents/guardians should support learners by creating a conducive atmosphere at home. The parents should also see to it that the learner is indeed making progress in his / her learning.

**Week – wise plans**  
**(Week – 17 onwards)**  
**for Higher Secondary School**  
**(As per Academic Work Plan)**

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**SUBJECT : ENGLISH CLASS – XI**

Expected Level of competency / Learning outcomes	Source / Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>Learners will have a deep insight into the earlier Egyptian life, culture and beliefs and will be able to gain a vast knowledge of archaeology</p> <p>Learners will be able to raise their concern about unfair things and seek a productive outcome using the language creatively.</p>	<p>TEXTBOOK : HORNBILL Chapter – 3 Discovering Tut :The Saga Continues</p> <p>Previous Knowledge : Letter Writing</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>The chapter gives us an in-depth insight of Tutankhamun, the last ruler of the powerful Pharaoh Dynasty in Egypt. He was just a teenager when he died and his death was a mystery. Howard Carter discovered his tomb in 1922. Since the discovery of his tomb, the modern world has speculated about what happened to him. Some speculated that he was murdered. The chapter talks about the various possibilities of his death.</p> <ol style="list-style-type: none"> <li>1. Read out the text carefully and underline all difficult words. Consult your dictionary for meanings to be able to interpret and appreciate the story.</li> <li>2. Give reasons for the following in about 30-40 words:             <ol style="list-style-type: none"> <li>(a) King Tut’s body has been subjected to repeated scrutiny</li> <li>(b) Tut’s body was buried along with gilded treasures.</li> </ol> </li> <li>3. What was the Pharaoh’s curse? Who refers to it and in what context?(30-40 words)</li> <li>4. What startling fact came to light in 1968 through X-ray?(30-40 words)</li> </ol> <p>Q. You are Kima, student of Class II at TZ Higher Secondary School, Champhai. You had placed an order for your textbooks at Zamzo Book Store, Dawrpui, Aizawl. When the items arrived you found that some of them were damaged. Write a letter to the Manager, Zamzo Book Store Dawrpui, Aizawl, asking him to replace the damaged items.</p>

<u>WEEK – 18</u>		
<p>Learners will be able to develop aesthetic sense know about Chinese Art and European Art Gain insight of ‘art brut’</p>	<p>Textbook- Hornbill Chapter 4 Landscape of the Soul</p>	<p>The chapter is about Art. It revolves around the art of painting told through the help of various stories. We learn about Chinese painters and European painters, their work as well as the story behind them. The concept of ‘art brut’ meaning the art of those who have no right to be called artists. An art which is the art of an untrained visionary, but shows remarkable talent and insight. Q 1) Who was Wu Daoji? Q 2) What does the European story of Quinten Metsy illustrate? Q 3) How did Nek Chand get international recognition?</p>
<p>Learners will be able to gain knowledge of the purpose and importance of a notice write in formal tone, to be precise and to the point apply innovative thinking using the language creatively</p>	<p>Previous knowledge Notice writing</p>	<p>Q. You are Lalsangliana of St James HSS. As student Editor of your school magazine, draft a notice in not more than 50 words for your school notice board inviting articles from students of class XI and XII.</p>
<p>Learners will see that punctuations help to use the language effectively and produce the learned grammatical structures accurately when used in verbal and written form.</p>	<p>Previous knowledge Grammar (Punctuation)</p>	<p>Rewrite the following sentences inserting the correct punctuations wherever necessary.</p> <ol style="list-style-type: none"> <li>1. the man bought the newspaper he was an avid reader of the telegraph</li> <li>2. in 1899 a war broke out between the british and the boers in south Africa</li> <li>3. you are the shortest person here arent you</li> <li>4. help i think im lost</li> <li>5. he bought the groceries eggs butter jam and sugar</li> <li>6. tom and my friend john exclaimed its great to see you</li> </ol>

<u>WEEK – 19</u>		
<p>Learners will be able to know and understand the unconditional love showered by a mother. They will be more aware about how precious mothers and housewives are and how they deserve a lot more than that is given.</p>	<p>TEXTBOOK : SNAPSHOTS Chapter – 5 Mothers Day</p>	<p>The play is a humorous portrayal of the status of the mother in a family. It reveals how a mother’s efforts are ignored. It narrates how the family members who work eight hour shifts a day look upon her although she works for the whole day and all week. After all she does for them, they take her for granted. They make her obligated to provide for them and do not even appreciate her efforts. It revolves around how her friend Mrs. Fitzgerald who is a fortune teller helps her earn the place and respect she deserves as the woman of the house.</p> <p>Q. Is drama a good medium for conveying a social message? Write your opinion.</p>
<p>Learners will be able to</p> <ul style="list-style-type: none"> <li>- identify determiners within sentences</li> <li>- use determiners accurately within sentences</li> <li>- make writing clearer by identifying and using determiners</li> </ul>	<p>Previous knowledge Grammar (Determiners)</p>	<p>Determiners are those words that are pre-fixed before nouns to determine their meaning.</p> <p>** Fill in the blanks with suitable Determiners.</p> <ol style="list-style-type: none"> <li>1. Will you please lend me _____ money?</li> <li>2. “Would you repeat that?” asked _____ teacher</li> <li>3. There isn’t _____ paper for me to write on.</li> <li>4. Don’t spend too _____ time on mobile games.</li> <li>5. His uncle is _____ university professor.</li> <li>6. I have just received _____ phone call from my best friend.</li> <li>7. I didn’t use _____ fertilizer last Spring.</li> <li>8. How _____ pages did you read?</li> <li>9. French is _____ easy language.</li> <li>10. No _____ than twenty workers were absent.</li> </ol>
<ul style="list-style-type: none"> <li>- Learners will connect the ideas in the text to their personal knowledge and create a mental construct. Learners’ reading skill will depend on how well the text is decoded. Readers will infer, clarify, question, search, summarize and organize.</li> </ul>	<p>Previous knowledge Comprehension</p>	<p>** Students will be made to read an unseen comprehension passage (of about 800 words) and answer questions from the given passage.</p> <p>** Underline difficult words from the passage and give their synonyms.</p> <p>** Choose the correct answer from the given options.</p>

<u>WEEK – 20</u>		
<p>Learners will learn how to</p> <ul style="list-style-type: none"> <li>- work as a team to be successful</li> <li>- to have positive thinking</li> <li>- face and deal with challenging situations and come up with an appropriate solution</li> </ul>	<p>Textbook – Hornbill Chapter- 8 Silk Road</p>	<p>Nick Middleton describes his journey to Mount Kailash, to complete the kora, he wishes to visit Mount Kailash. He faces a lot of difficulties but is able to complete his pilgrimage with his positive thinking strategy. We can understand the determination of pilgrims and the hardships they face.</p> <p>Q 1) Why did the author feel disappointed with the town of Hor? Q 2) Why did the author not dare to do the kora alone? Q 3) Who was Norbu?</p>
<p>Learners will learn how to</p> <ul style="list-style-type: none"> <li>- make use of appropriate format, expression and vocabulary</li> <li>- express and write effectively</li> <li>- describe different kinds of advertising appeals using the language creatively.</li> </ul>	<p>Previous knowledge (Advertisement)</p>	<p>** You are the General Manager, Hotel Royal, Bawngkawn. You need a lady office assistant with sound knowledge of computers. Draft an advertisement in not more than 50 words to be published in the local daily newspaper, stating all the necessary qualifications</p>
<ul style="list-style-type: none"> <li>- Learners should develop insight into the structure of English language and be able to solve grammar exercises with or without context, following the definition and rule of the grammatical item</li> </ul>	<p>Previous knowledge Grammar ( Tenses)</p>	<p>Fill in the blanks with the correct form of the verb given in the brackets.</p> <ol style="list-style-type: none"> <li>1. The soup _____ good. (taste)</li> <li>2. The baby _____ all morning. (cry)</li> <li>3. When I opened my eyes I _____ a strange sight. (see)</li> <li>4. I _____ (is) angry that I _____ (make) such a stupid mistake.</li> <li>5. The actors _____ their dialogue. (rehearse)</li> <li>6. He _____ the bagpipes since six in the morning. (play)</li> <li>7. If my brother _____ soon I'll send him a text. (not arrive)</li> <li>8. My students _____ to me when I gave them the instructions. (not listen)</li> <li>9. I _____ my grandparents since last summer. (not see)</li> <li>10. This _____ an easy exercise so far. (be)</li> </ol>



<p>The learners will be able to appreciate and imbibe the never give-up attitude. The learners will also be able to learn the value of dedication to work.</p> <p>To ensure that the learners are thorough with the concepts in English grammar. It will enhance learners' confidence in not only speaking the language but also in reading and writing</p>	<p>TEXTBOOK : SNAPSHOTS Chapter – 7 BIRTH</p> <p>Previous knowledge Grammar (Tenses)</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>The chapter is an extract from A.J. Cronin's novel "The Citadel". This extract describes how a young doctor revives a child that is born lifeless. The theme of the story revolves around the efforts being put in by medical practitioners in treating their patients. Andrew the protagonist is dealing with a critical medical birth case. Unfortunately, the baby born is lifeless. However, Andrew does not let go and makes his best of efforts in saving the patient. He not only succeeded in reviving the baby but also ended up saving the mother.</p> <p>Q. Read the text thoroughly and answer the questions below in around 30-40 words :</p> <ol style="list-style-type: none"> <li>Why was Joe Morgan waiting for Andrew?</li> <li>What was the treatment given to the child?</li> <li>What were the only sounds that Andrew heard in the thick of the night?</li> </ol> <p>Q. Fill in the blanks with the correct form of present tense from those given in brackets.</p> <ol style="list-style-type: none"> <li>I am attempting the upcoming civil services exam, so I _____ (am/is) studying hard these days.</li> <li>My grandmother _____ (carries/carrying) a walking stick when she goes out for a walk.</li> <li>The children _____ (has eaten/have eaten) the cake.</li> <li>Can you speak louder please, I _____ (am not / cannot) hear you.</li> <li>Lydia isn't at home. She _____ (is/are) out shopping with our father.</li> <li>My widower uncle often _____ (coming / comes) to our house for lunch on Sundays.</li> <li>Since he changed his job, he _____ (found/ has found) more time to relax and enjoy his hobby.</li> <li>She is _____ (wearing/wears) her new dress.</li> <li>An apple a day _____ (keeps/is keeping) the doctor away.</li> <li>By profession, an artist _____ (creates/is creating) a picture whereas an author _____ (writes/is writing) a book.</li> </ol>
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**SUBJECT : ENGLISH Class – XII**

Expected Level of Competency/ Learning Outcomes	Source/ Resource	Week – wise suggestive activities ( To be guided by Teachers)
<p>Students can learn to reaffirm faith in the fact that one act of kindness can redeem the deprived. Learners will use textual evidence to support various arguments and lines of thinking and produce creative narratives that offer moral lessons.</p> <p>Learners will demonstrate independence in gathering vocabulary and information in an organized manner using appropriate language and format.</p>	<p>TEXTBOOK : Flamingo LESSON – 4 The Rattrap</p> <p>Previous knowledge Classified advertisement</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>The Rattrap peddler survives through petty thieveries, such as stealing the hard-earned thirty kronor of the man who sheltered him for a night and by selling rattraps to people. He lives in so much impoverishment that his world view has become cynical. He looks at the world as a trap where we are pulled in by materialistic things. Towards the end of the story, we see a change in the peddler’s morality as a result of being treated with respect by Edla Willmanson. Showing love and kindness to others can change people’s lives in more ways than we can imagine.</p> <p>Answer in 30- 40 words</p> <ol style="list-style-type: none"> <li>1. Why did the peddler keep to the woods after leaving the crofter’s cottage?</li> <li>2. Why did Edla plead with her father to not send the vagabond away?</li> <li>3. What made the peddler finally change his ways?</li> </ol> <p>You want to rent out your newly constructed flat in the heart of the city. Draft an advertisement in not more than 50 words to be published in your local newspaper. Give all the necessary details.</p>
<p>Learners will interpret and appreciate the story and express opinions on the moral issue which the story raises : If the parents should always decide what the children should do or let the children do what they like to do</p>	<p>TEXTBOOK : VISTAS LESSON – 5 Should Wizard Hit Mommy</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>The chapter captures a very sensitive reaction of a small girl to an important aspect of the story that her father narrates to her. The story reveals the worldview of a little child to a difficult moral question that shows her mental or psychological richness. This story raises a moral question “Should Wizard Hit Mommy?”. Jo feels that he must while her father Jack says that it would be wrong because a mommy is always right. She should be loved and respected.</p> <p>Q. On the basis of your reading of the text, answer the question below :</p>

<p>Learners should learn productive skill of writing and take steps to resolve the problem in a creative and articulate manner</p>	<p>Previous knowledge Advertisement</p>	<p>Why does Jack insist that it was the wizard that was hit and not the mother? (Word limit 120)</p> <p>Q. You are Richard, Durtlang Aizawl. You want to sell your old car. Draft a suitable advertisement in not more than 50 words to be inserted in 'Vanglaini' daily newspaper giving all necessary details of the car.</p>
<p>Learners will see that effective leadership can overcome any obstacle as shown by Mahatma Gandhi in securing justice for the oppressed through convincing argumentation and negotiations</p> <p>Learners will depict innovative thinking, learn productive skill of writing and take steps to resolve the problem in a creative and articulate manner</p>	<p>Textbook – Flamingo Chapter – Indigo Page 47-50</p> <p>Previous knowledge Advertisement</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>The sharecroppers of Champaran were in a miserable situation as the British planters compelled them to raise indigo on 15% of their land and surrender the entire indigo harvest as rent. When indigo cultivation was no longer profitable, the British demanded money as compensation for being released from the 15% arrangement. Gandhi arrived at this point and fought for the peasants thus bringing an end to the injustice.</p> <p>Answer the following questions in about 30 – 40 words.</p> <p>Q1. Why did Gandhi go to Lucknow in 1916? Who met him there and why?</p> <p>Q2. How did the development of synthetic indigo affect the English estate owner and the Indian tenants?</p> <p>Q3. What was the conflict of duties in which Gandhi was involved?</p> <p>### Sunrise Enterprise, Zarkawt requires a receptionist for their store. Draft a suitable advertisement in about 50 words to be published in the classified column of a local daily, giving all the necessary details of qualifications and experience required for the job.</p>

<p>Learners will learn the importance of</p> <ul style="list-style-type: none"> <li>- Solving problems through peaceful means without violence- Gandhi’s policy of non-violence</li> <li>- understanding racism, injustice, discrimination, bullying etc and how to respond and ask for help</li> </ul> <p>Learners will be able to depict innovative thinking using the language creatively</p>	<p>Textbook- Flamingo Chapter- Indigo Page 51-54</p> <p>Previous knowledge Advertisement</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>The battle of Champaran is won. Now Gandhi focused on moulding a new free Indian who could stand on his own two feet and thus make India free. He also rendered help in bringing about changes in cultural and social backwardness.</p> <p>Answer the following questions in about 30 – 40 words.</p> <p>Q1. What do you think led Gandhi to exclaim “The battle of Champaran is won”?</p> <p>Q2. How was Gandhi able to convince the lawyers about Charles Freer Andrews?</p> <p>Q3. What did Gandhi do in respect of the cultural and social backwardness of the Champaran villages?</p> <p>## You have lost your bag containing important documents while travelling by a city bus. Write an advertisement in about 50 words to be published in the ‘Lost and Found’ column of a newspaper.</p>
<p>Learners will be made aware of their responsibilities in helping the handicapped to overcome their loneliness and mental pain. Learners will be able to know how appearances are deceptive</p>	<p style="text-align: center;">TEXTBOOK : VISTAS LESSON – 6 On The Face of It</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>The play is about the friendship between an old man and a young boy who is withdrawn and defiant. Both of them had some physical impairment, but the outlook of each of them towards life in general and people in particular was very different. The old man had a positive outlook towards life, whereas the young boy with the scarred face had become withdrawn and pessimistic.</p> <p>Q. Read the text thoroughly and answer the questions below in around 30 – 40 words :</p> <p>(a) Who is Mr. Lamb? How does Derry get into his garden?</p> <p>(b) Will Derry get back to his old seclusion or will Mr. Lamb’s brief association effect a change in the kind of life he will lead in the future?</p> <p>(c) What realization comes to Derry about his face at the end of the play?</p>

**Subject : MIZO Class– XI**

Expected Level of Competency/Learning Outcomes	Sources / Resource	Week-wise suggestive activities (to be guided by Teacher)
<ul style="list-style-type: none"> <li>• Zirlai naupang chuan a hla zir lai hla thu awmzia a hria ang.</li> <li>• Zirlai naupang chuan a hla zirin a sawi tum tlangpui a hre thiam tur a ni a. A hriat thiamna atangin a ngaih dan a sawi chhuak thiam baw ang.</li> <li>• Zirlai naupang chuan nungchate mawina leh hlutna a zir chhuak thiam ang.</li> </ul>	<p>MBSE TEXTBOOK MIZO CLASS 11</p> <p>THEN I-NA</p> <p>HLA (POETRY)</p> <p><b>Nungchate</b></p> <p>By R. Rochungnunga</p>	<p style="text-align: center;"><u>Week – 17</u></p> <ol style="list-style-type: none"> <li>1. Mihringte tana nungchate hlutzia fiah takin han sawi teh.</li> <li>2. R.Rochungnunga'n, "Awi maw a rawng lei hring nun hi" a tihna chhan hrang hrangte kha han sawi teh.</li> <li>3. Nungchate an lo rem zelna kawngah mihring ten mawh kan phurh nasatzia 'Nungchate' tih hla beh chhanin sawi rawh.</li> <li>4. R.Rochungnunga'n nungcha chi hrang hrangte hla thu mawi tak tak hmangin a sawi teuh mai a, chungte chu la chhuak la, a awmzia sawi zel ang che.</li> </ol>
<ul style="list-style-type: none"> <li>• Zirlai naupang chuan a hla zir awmzia a hre thiam ang.</li> <li>• Zirlai naupang chuan hnam zia leh pi leh pute nun a hre Chiang leh zual ang.</li> <li>• Zirlai naupang chuan hla thu (poetic word) ah Mizo tawng a hausakzia a hriat chhuah bâkah a awmzia a hriat phah ang.</li> </ul>	<p>MBSE TEXTBOOK MIZO CLASS 11</p> <p>THEN I-NA</p> <p>HLA (POETRY)</p> <p><b>German Run Zai</b></p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>1. 'German Run Zai' hi i sa thiam lo a nih chuan sak thiam tum la. Youtube-ah i hmu thei ang a, upa zawkte pawh rawn tur tam tak an awm e.</li> <li>2. "Sikin Manding Sap i lung mawl e" titu hi eng mi nge a nih? Eng vangin nge 'i lung mawl e' a tih mai le?</li> <li>3. In zir laibu-ah hian German Run Zai panga(5) in zir a. A vai hian thu tluang (prose form) in han zia chhawng teh.</li> </ol>
<ul style="list-style-type: none"> <li>• Zirlai naupang chuan Mizo tawng dik takin a chhiar thiam ang.</li> <li>• Zirlai naupang chuan Mizo tlangvalte hi mi dangte entawn tlâk khawpa an huaisenzia a zir chhuak ang.</li> <li>• Zirlai naupang chuan Lushai Scout Corps awmzia leh a indin dan a hria ang.</li> <li>• Zirlai naupang chuan Indopui-II-na laia Mizo ten anmahni awptu British tana an beih ve dan a hria ang.</li> </ul>	<p>MBSE TEXTBOOK MIZO CLASS 11</p> <p>THEN II-NA</p> <p>THU (PROSE)</p> <p><b>Mizo tlangval rual leh Japan râl</b></p> <p>By Zokima</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ol style="list-style-type: none"> <li>1. 'Mizo tlangval rual leh Japan râl' Zokima ziah hi uluk takin chhiar chhuak rawh.</li> <li>2. Pasaltha A pawl leh Pasaltha B pawl danglamna zia rawh.</li> <li>3. Lushai Scout Corps din a tûl chhan leh din a nih dan kha han zia teh.</li> <li>4. Mizo tlangval rual (Lushai Scout) in Suangpi khaw bula Japan sipai bunker an beih dan kha ngaihnawm takin han sawi chhawng teh le.</li> </ol>

<ul style="list-style-type: none"> <li>• Zirlai naupang chuan Mizo tawng dik takin a chhiar thiam ang.</li> <li>• Zirlai naupang chuan hmanlai Mizo hnam hrang hrangte nun leh khawsak dan a hria ang.</li> <li>• Zirlai naupang chuan sap hun awmzia dik tak a hria ang.</li> <li>• Zirlai naupang chuan Mizo hnamin a huam chinte a hria ang.</li> </ul>	<p style="text-align: center;">MBSE TEXTBOOK MIZO CLASS 11</p> <p style="text-align: center;">THEN II-NA</p> <p style="text-align: center;">THU (PROSE)</p> <p style="text-align: center;"><b>Mizo, hnam leh sakhua</b></p> <p style="text-align: center;">By LalRinawma</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>1. ‘<i>Mizo, hnam leh sakhua</i>’ Lal Rinawma ziah hi uluk takin han chhiar chhuak teh.</li> <li>2. Mizo hnahtlâk hnam hrang hrang ten hmanlai huna sam an sawngbawl dan kha ziaak rawh.</li> <li>3. Sap hun awmzia fiah takin han sawi teh.</li> <li>4. Zo hnahtlak hrang hrang ten sakhaw hmanna serh an dahna hmun kha sawi rawh.</li> <li>5. He thuziaktu Lal Rinawma’n ‘<i>Mizo</i>’ a tihte chu tu te nge ni?</li> </ol>
<ul style="list-style-type: none"> <li>• Zirlai naupang chuan Mizo tawng dik takin a chhiar thiam tur a ni a, a thu chhiarte a awmzia a hriain a sawi chhawng thiam bawak ang.</li> <li>• Zirlai naupang chuan Mizorama Chanchin tha lo luh hun leh a lo luh dan a hria.</li> <li>• Zirlai naupang chuan Mizorama Chanchin tha hriltu (Missionary) te hnathawh pawimawh tak takte a hria ang.</li> <li>• Zirlai naupang chuan Chanchin tha hlutna a hre thiam ang.</li> </ul>	<p style="text-align: center;">MBSE TEXTBOOK MIZO CLASS 11</p> <p style="text-align: center;">THEN II-NA</p> <p style="text-align: center;">THU (PROSE)</p> <p style="text-align: center;"><b>Chanchin Tha Malsawmna</b></p> <p style="text-align: center;">By Z.T. Sangkhuma</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ol style="list-style-type: none"> <li>1. ‘<i>Chanchin tha malsawmna</i>’ Z.T. Sangkhuma ziaak hi ngun takin chhiar chhuak rawh.</li> <li>2. Mizorama Chanchin tha lo luh dan tawi tein han ziaak teh.</li> <li>3. Chanchin tha avanga Mizo ten hriselna kawnga hma kan sawn dan han ziaak teh.</li> <li>4. Chanchin tha avanga Mizo ten zirna kawnga hma kan sawn dan ziaak rawh.</li> <li>5. Chanchin thain Mizote hlauhna ata min chhan chhuah dan tawi fel takin ziaak rawh.</li> </ol>

Subject : MIZO Class – XII

Expected Level of Competency/Learning Outcomes	Sources / Resources	Week-wise suggestive activities (to be guided by Teacher)
<ul style="list-style-type: none"> <li>• Zirlai naupang chuan an zirlai thu leh hla phuah tute chanchin tlangpui tal hre ve se.</li> <li>• Zirlai naupang chuan hla thu-a Mizote kan hausakzia an hria ang.</li> <li>• Zirlai naupang chuan an zirlai hla thu harsate awmzia an hria ang.</li> <li>• Zirlai naupang chuan an zirlai hlate tawng tuang pangngaia dah pawh an thiam bawk ang.</li> </ul>	<p>MBSE TEXTBOOK MIZO CLASS 12</p> <p>THEN I-NA</p> <p>HLA (POETRY)</p> <p><b>Hausiampa Zai</b></p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ol style="list-style-type: none"> <li>1. Hausiampa chanchin i hriat a piang han ziak teh.</li> <li>2. Hausiampa'n '<i>Ka rin khum che'm ni le</i>' a tih kha tu nge? Eng vanga chu tia ti nge a nih?</li> <li>3. Hausiampa Zai No.6 kha a chin chhuakin chhui la, hrih fiah rawh.</li> <li>4. Hausiampa Zai No.2 kha tawng tuang pangngai (prose form) in han ziak teh.</li> <li>5. Heng hla thu harsate hi hrih fiah rawh:               <ul style="list-style-type: none"> <li>(i) <i>lawhlei</i></li> <li>(ii) <i>khuandim</i></li> <li>(iii) <i>vailung hlan</i></li> <li>(iv) <i>kawlfung</i></li> </ul> </li> </ol>
<ul style="list-style-type: none"> <li>• Zirlai naupang chuan Mizo tawng dik takin an chhiar thiam tur a ni a, an chhiarin a awmzia an hre thiam bawk ang.</li> <li>• Zirlai naupangin Mizo chanchin (history) eng emaw chen tal an hriat nan.</li> <li>• Zirlai naupang chuan Mizo thu leh hla (literature) chungchang leh a than chhoh zel dan an hria ang.</li> <li>• Zirlai naupang chuan Chanchin tha kan dawn hnua kan thu leh hla hmasawn chhoh zel dan an hria ang.</li> </ul>	<p>MBSE TEXTBOOK MIZO CLASS 12</p> <p>THEN II-NA</p> <p>THU (PROSE)</p> <p><b>Mizo thu leh hla tobul</b></p> <p>By B. Lalthangliana</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>1. B. Lalthangliana ziah, '<i>Mizo thu leh hla tobul</i>' tih kha ngun takin chhiar chhuak rawh.</li> <li>2. '<i>Oral literature</i>' tih hi a awmzia fiah takin han sawi teh.</li> <li>3. '<i>Bawh hla</i>' leh '<i>hlado</i>' danglamna han sawi teh.</li> <li>4. Mizo chanchina <i>Laltheri</i> leh <i>Darpawngi</i> pawimawhna han ziak teh.</li> <li>5. Mizo ten A, Aw, B kan neih tan dan kha han sawi teh.</li> <li>6. Mizo ten Bible bu kim kan lo neih dan tawi fel takin han ziak teh.</li> <li>7. Tlar hnih hla chi hrang hrangte lo chhuah dan kha han sawi teh.</li> </ol>

<ul style="list-style-type: none"> <li>• Zirlai naupang chuan an zirlai an chhiarin a awmzia an hre thiam ang.</li> <li>• Zirlai naupang chuan Literature awmzia an hria ang.</li> <li>• Zirlai naupang chuan ama irawm chhuak ngeiin literature a hrilh fiah thiam ang.</li> <li>• Zirlai naupang chuan Mizo hnam zai leh hla thlavang hauh a tul chhan a hre tur a ni.</li> </ul>	<p style="text-align: center;">MBSE TEXTBOOK MIZO CLASS 12</p> <p style="text-align: center;">THEN II-NA</p> <p style="text-align: center;">THU (PROSE)</p> <p style="text-align: center;"><b>Mizo hnam zai leh hla thlavang hauhna</b></p> <p style="text-align: center;">By C. Lalsiamthanga</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ol style="list-style-type: none"> <li>1. C. Lalsiamthanga ziah ‘<i>Mizo hnam zai leh hla thlavang hauhna</i>’ tih kha ngun takin chhiar chhuak ang che.</li> <li>2. Siamkima Khawlhiringin literature a hrilh fiah dan kha han ziaak teh.</li> <li>3. Literature hrilh fiahna, ‘<i>hei hi a dik a ni</i>’ tia pawmtlan theih a awm lohna chhan sawi rawh.</li> <li>4. Literature tehfung dik nia i hriat sawi la, entirna pe baw rawh.</li> <li>5. Nangma irawm chhuak ngeiin literature han hrilh fiah teh.</li> <li>6. C. Lalsiamthanga’n Mizo hnam zai leh hla thlavang hauh tul a tih chhan fiah takin sawi rawh.</li> </ol>
<ul style="list-style-type: none"> <li>• Zirlai naupang chuan an zirlai dik takin an chhiar thiam tur a ni a, an thu chhiar awmzia an hrethiam baw rawh ang.</li> <li>• Zirlai naupang chuan hmanlai Mizo khawtlang nun an hria ang.</li> <li>• Zirlai naupang chuan tunlai Mizo khawtlang nun an hria ang.</li> <li>• Zirlai naupang chuan hmanlai leh tunlai Mizo khawtlang nun an khaikhin thiam ang.</li> </ul>	<p style="text-align: center;">MBSE TEXTBOOK MIZO CLASS 12</p> <p style="text-align: center;">THEN II-NA</p> <p style="text-align: center;">THU (PROSE)</p> <p style="text-align: center;"><b>Kan nun khuarei an chang tur hi.</b></p> <p style="text-align: center;">By C. Thuamluaia</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>1. C. Thuamluaia ziah, ‘<i>Kan nun khuarei an chang tur hi</i>’ tih kha ngun takin chhiar chhuak ang che.</li> <li>2. Mizo hla phuah thiamten hmanlai Mizo kuaah hmun pawimawh tak an luah dan tawi fel takin sawi rawh.</li> <li>3. Thihna chung changa mi chhia leh hnamchawmte inhnemna ber kha eng nge ni?</li> <li>4. C. Thuamluaia’n lunglen hun ber a tih kha sawi la, eng vanga lunglen hun ti mai nge a nih sawi baw rawh.</li> <li>5. Hmanlai leh tunlai Mizo nun tawi tein khaikhin rawh.</li> <li>6. C. Thuamluaia’n kan nun khuarei an chang tur paw a tih em em chhan fiah takin sawi rawh.</li> </ol>



<ul style="list-style-type: none"> <li>• Zirlai naupang chuan Mizo Tawng dik takin a chhiar thiam ang a, a thu chhiar awmzia a hre bawk ang.</li> <li>• Zirlai naupang chuan thinrim awmzia leh a nghawng chhuahte a hria ang.</li> <li>• Zirlai naupang chuan thinrim avanga ruih theih thil tih that lohzia a hria ang.</li> <li>• Zirlai naupang chuan thinrimna hmachhawn dan tur a thiam ang.</li> </ul>	<p style="text-align: center;">MBSE TEXTBOOK MIZO CLASS 12</p> <p style="text-align: center;">THEN II-NA</p> <p style="text-align: center;">THU (PROSE)</p> <p style="text-align: center;"><b>I thinrim elo?</b></p> <p style="text-align: center;">By C.Lalhrekima</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ol style="list-style-type: none"> <li>1. C. Lalhrekima ziah, ‘<i>I thinrim elo</i>’ tih kha ngun takin chhiar chhuak rawh.</li> <li>2. Thinrim hi sual a ni em? A chhan han sawi teh.</li> <li>3. Kan thinrimnain a nghawng pawl theih hriselna tehfung pali han sawi teh.</li> <li>4. I thinrim a ni tih i inhriat veleh a zawhna i inzawh tur leh a chhanna i ngaihtuah turte chu engte nge?</li> <li>5. Thinrim avanga zu leh ruih theih thil tih that lohna sawi rawh.</li> <li>6. Thinrimna hi engtia hmachhawn tur nge ni ang?</li> </ol>
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**Subject : POLITICAL SCIENCE Class – XI**

Expected Level of Competency/Learning Outcomes	Sources / Resources	Week-wise suggestive activities (to be guided by Teacher)
<ul style="list-style-type: none"> <li>• The students will be able to know the importance of our mindset for the maintenance of Peace.</li> <li>• The students will be able to learn the nature of independence of Judiciary.</li> </ul>	<ol style="list-style-type: none"> <li>1. Political Theory Chapter - 9. <b>Peace.</b> (NCERT Textbook)</li> <li>2. Indian Constitution at Work. Chapter - 6. <b>Judiciary.</b> (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ol style="list-style-type: none"> <li>1. Do you think that a change towards a peaceful world needs a change in the way people think? Can mind promote peace and is it enough to focus only on the human mind?</li> <li>2. Does independence of the judiciary mean that the judiciary is not accountable to any one? Write your answer in not more than 100 words.</li> </ol>
<ul style="list-style-type: none"> <li>• The students will be able to learn the role of State in maintaining Peace as well as Violence.</li> <li>• The students will be able to know the procedures for the development of independence of Judiciary.</li> </ul>	<ol style="list-style-type: none"> <li>1. Political Theory. Chapter - 9. <b>Peace.</b> (NCERT Textbook)</li> <li>2. Indian Constitution at Work. Chapter - 6. <b>Judiciary.</b> (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>1. A State must protect the lives and rights of its citizens. However, at times its own actions are a source of violence for some of its citizens. Comment with the help of suitable examples.</li> <li>2. What are the different provisions in the constitution in order to maintain the independence of judiciary?</li> </ol>
<ul style="list-style-type: none"> <li>• The students will be able to learn the importance of freedom, equality and justice for the maintenance of Peace.</li> <li>• The students will be able to know how Public Interest Litigation is useful for the society.</li> </ul>	<ol style="list-style-type: none"> <li>1. Political Theory Chapter - 9. <b>Peace.</b> (NCERT Textbook)</li> <li>2. Indian Constitution at Work. Chapter - 6. <b>Judiciary.</b> (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ol style="list-style-type: none"> <li>1. Peace can be best realised when there is freedom, equality and justice. Do you agree?</li> <li>2. In what way can public interest litigation help the poor?</li> </ol>

<ul style="list-style-type: none"> <li>• The students will be able to know that violence does not always promote peace in the long run.</li> <li>• The students will be able to learn the relationship between Judiciary and Executive.</li> </ul>	<ol style="list-style-type: none"> <li>1. Political Theory. Chapter - 9. <b>Peace.</b> (NCERT Textbook)</li> <li>2. Indian Constitution at Work. Chapter - 6. <b>Judiciary.</b> (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>1. Use of violence does not achieve just ends in the long run. What do you think about this statement ?</li> <li>2. Do you think that judicial activism can lead to a conflict between the judiciary and the executive ?Why ?</li> </ol>
<ul style="list-style-type: none"> <li>• The students will be able to learn the different approaches for the establishment of Peace.</li> <li>• The students will be able to learn how judicial activism, to some extent, may protect the Fundamental Rights.</li> </ul>	<ol style="list-style-type: none"> <li>1. Political Theory. Chapter - 9. <b>Peace.</b> (NCERT Textbook)</li> <li>2. Indian Constitution at Work. Chapter - 6. <b>Judiciary.</b> (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ol style="list-style-type: none"> <li>1. Differentiate between the major approaches, discussed in the chapter, to the establishment of peace in the world.</li> <li>2. How is judicial activism related to the protection of fundamental rights ? Has it helped in expanding the scope of Fundamental Rights ?</li> </ol>

**Subject : POLITICAL SCIENCE Class – XII**

<b>Expected Level of Competency/Learning Outcomes</b>	<b>Sources/Resources</b>	<b>Week-wise suggestive activities (to be guided by Teacher)</b>
<ul style="list-style-type: none"> <li>• The learners will be able to know the Security Council of UN and their functions.</li> <li>• The learners will be able to learn the nature and problems of the North-East States and the causes of their movements.</li> </ul>	<ol style="list-style-type: none"> <li>1. Contemporary World Politics. Chapter – 6 International Organisations. (NCERT Textbook)</li> <li>2. Politics in India Since Independence. Chapter - 8 The Crisis of Democratic Order (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ol style="list-style-type: none"> <li>1. What are the functions of the Security Council?</li> <li>2. Regional aspirations of the people of North-East get expressed in different ways. These include movements against outsiders, movement for greater autonomy and movement for separate national existence. On the map of the North-East, using different shades for these three, show the States where these expressions are prominently found.</li> </ol>
<ul style="list-style-type: none"> <li>• The students will be able to learn the positions and capability of India and justify the claims to be a permanent member of UN Security Council.</li> <li>• The students will be able to know the problems and crises faced by Punjab and its neighbouring states.</li> </ul>	<ol style="list-style-type: none"> <li>1. Contemporary World Politics. Chapter – 6 International Organisations. (NCERT Textbook)</li> <li>2. Politics in India Since Independence. Chapter – 8 The Crisis of Democratic Order (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>1. As a citizen of India, how would you support India’s candidature for the permanent membership of the Security Council? Justify your proposal.</li> <li>2. What were the main provisions of the Punjab Accord? In what way can they be the basis for further tensions between the Punjab and its neighbouring States?</li> </ol>
<ul style="list-style-type: none"> <li>• The students will be able to learn how difficult to amend and reconstruct the UN.</li> <li>• The students will be able to know the problems and the consequences of Jammu and Kashmir State.</li> </ul>	<ol style="list-style-type: none"> <li>1. Contemporary World Politics. Chapter – 6 International Organisations. (NCERT Textbook)</li> <li>2. Politics in India Since Independence. Chapter - 8 The Crisis of Democratic Order (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ol style="list-style-type: none"> <li>1. Critically evaluate the difficulties involved in implementing the suggested reforms to reconstruct the UN.</li> <li>2. Explain the internal divisions of the State of Jammu and Kashmir and describe how these lead to multiple regional aspirations in that State.</li> </ol>

<ul style="list-style-type: none"> <li>• The students will be able to know the capability of UN in preventing War, and yet how it is still a necessary Organisation.</li> <li>• The students will be able to know the nature and background of Assam movement.</li> </ul>	<ol style="list-style-type: none"> <li>1. Contemporary World Politics. Chapter – 6 International Organisations. (NCERT Textbook)</li> <li>2. Politics in India Since Independence. Chapter - 8 The Crisis of Democratic Order (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>1. Though the UN has failed in preventing wars and related miseries, nations prefer its continuation. What makes the UN an indispensable organisation?</li> <li>2. The Assam movement was a combination of cultural pride and economic backwardness. Explain.</li> </ol>
<ul style="list-style-type: none"> <li>• The students will be able to know how important is the security Council in UN.</li> <li>• The students will be able to know the nature and causes of Regional movements.</li> </ul>	<ol style="list-style-type: none"> <li>1. Contemporary World Politics. Chapter – 6 International Organisations. (NCERT Textbook)</li> <li>2. Politics in India Since Independence. Chapter - 8 The Crisis of Democratic Order (NCERT Textbook)</li> </ol>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ol style="list-style-type: none"> <li>1. ‘Reforming the UN means restructuring of the Security Council’. Do you agree with this statement? Give arguments for or against this position.</li> <li>2. All regional movements need not lead to separatist demands. Explain by giving examples from this chapter.</li> </ol>

**Subject : HISTORY Class – XI**

Expected Level of Competency/ Learning Outcomes	Source / Resource	Week-wise suggestive activities (to be guided by teachers)
<p><b>The learners</b>                      -will gain knowledge about the development of writing in Mesopotamia                      - will be able to understand the life in the city of Mesopotamia                      - will be able to understand and know the legacy of writing left by the Mesopotamians.</p>	<p><b>NCERT TEXTBOOK</b>                      Textbook in History for Class XI :                      -Themes in world History                      -Theme 2: Writing and City Life                      -The development of writing ( page 33 &amp; 34 )                      - Life in the city (page 39 &amp; 40)                      - Page 40                      - The legacy of writing (page 45)</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Read the text thoroughly and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Explain the development of writing in Mesopotamia.</li> <li>2. What was the norm of family in the Mesopotamian society?</li> <li>3. Ur was one of the earliest cities to have been excavated. Briefly explain the city of Ur.</li> <li>4. Explain the legacy left by Mesopotamia to the world.</li> </ol>
<p>-will be able to recall about the socio-economic and political changes which occurred in Western Europe between the ninth and sixteenth centuries from his/her previous knowledge                      - will be able to define the power of the Church-a major landholder and political power in Europe.</p>	<p>Textbook in History for Class XI :                      Themes in world History                      Theme : 6                      -The three orders                      - sources that can be consulted to answer suggestive questions                      -                      -Monks ( page 138 - 139)                      - Cathedral Towns ( page 146)</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Learners are suggested to read Theme 6  <b>THE THREE ORDERS</b>, the focus of this Chapter will be:                      - Christian Priests, Landowning Nobles and Peasants which shaped European history for several centuries.                      Read the text thoroughly and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Define the word 'Monastery'. What was the function of Medieval Monasteries?</li> <li>2. Mention the five chapters of rules laid down by Benedictine Monasteries which were followed by Monks for many centuries.</li> <li>3. What was the Cathedral-Town in France?</li> </ol>

<p>-will acquire knowledge about Japan's rapid economic and industrial progress throughout the twentieth century</p> <p>-will be able to understand the changes that took place in Japanese history.</p>	<p align="center"><b>Themes in Indian History Class XI</b></p> <p>NCERT Textbook Theme 11: Paths to Modernization</p> <p>-The Political system of Japan</p> <p>-Meiji Restoration</p> <p>-Modernizing the Economy</p> <p>-About the life of the industrial workers</p> <p>-(Pages 231-239)</p>	<p align="center"><u>WEEK – 19</u></p> <p>Read the chapter carefully and answer the following questions</p> <ol style="list-style-type: none"> <li>What is meant by the slogan 'Fukoku Kyohei' under the Meiji rule in Japan?</li> <li>Mention two physical features of Japan.</li> <li>Mention the various reforms brought by the Meiji Restoration.</li> <li>What were the major developments before the Meiji Restoration that made it possible for Japan to modernize rapidly?</li> </ol>
<p>-will be able to know the efforts taken by Japan to become global economic power after the Second World War</p> <p>-will gain knowledge about the development and political changes that took place in China.</p>	<p align="center"><b>Theme 11: Paths to Modernisation</b></p> <p>-Aggressive nationalism</p> <p>-After defeat- Re-emerging as a global economic power</p> <p>-China establishing the republic</p> <p>-Rise of the Communist Party of China.</p> <p>-(Pages 239-252)</p>	<p align="center"><u>WEEK – 20</u></p> <p>Read the theme carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>What were Sun Yat-Sen's Three Principles?</li> <li>What is meant by "The Great Leap Forward Movement"?</li> <li>Discuss how daily life was transformed as Japan developed.</li> <li>How did Japan re-emerge as an economic power of the world after the defeat in the Second World War?</li> <li>Discuss the rise of the Communist Party of China.</li> </ol>
<p>-will be able to realize and understand how great leader could change the economy and political life of a country</p> <p>-will be able to understand the growth of democracy and how it affects the life of the people.</p>	<p align="center"><b>Theme 11: Paths to Modernisation</b></p> <p>-The story of Taiwan</p> <p>-The story of Korea</p> <p>-Rapid industrialization under strong leadership</p> <p>-(Page 252-259)</p>	<p align="center"><u>WEEK – 21</u></p> <p>Read the theme carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>Who establish the Republic of China in Taiwan?</li> <li>What happen to Taiwan after the death of Chiang Kai-Shek in 1975?</li> <li>How did Korea deal with the foreign currency crisis in 1997?</li> </ol>

**Subject : HISTORY Class – XII**

Expected Level of Competency / Learning Outcomes	Source/Resource	Week-wise suggested activities( to be guided by teachers)
<p><b>Learners-</b>                      -will gain knowledge about the decipherment of early inscriptions.                      -will be able to know about the early empire of the Mauryas.                      - will be able to understand the importance of prashastis.                      -will be able to gain knowledge about the lives of ordinary people in the 6th century BCE and 6th century CE.</p>	<p><b>Themes in Indian History Part- I</b>                      Theme 2: Kings, Farmers and Towns                      -Prinsep and Piyadassi -page 28                      -Finding out about the Mauryas -Page 32                      -Page 37                      -Differences in rural society (Page 39)                      -A changing countryside -Page 38-43                      -New notions of kingship -Pages 35-37</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Read the chapter thoroughly and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Who was James Prinsep?</li> <li>2. Explain the sources to reconstruct the history of the Mauryan Empire.</li> <li>3. What is the 'Prayaga Prashasti' or the Allahabad Pillar Inscription?</li> <li>4. Write the meaning of these terms- vellalar, uzhar, and adimai.</li> <li>5. How do historians reconstruct the lives of ordinary people?</li> <li>6. Describe the notions of kingship that developed in the post-Mauryan period.</li> </ol>
<p>-will be able to know about the life of the agrarian society from various available sources.                      - will be able to gain knowledge of the rules and regulations of the village community.</p>	<p><b>Themes in Indian History Part II</b>                      NCERT Textbook History Textbook for Class XII                      Theme 8: Peasants, Zamindars and the State Agrarian Society and the Mughal Empire(Sixteenth to Seventeenth Centuries)                      -Peasants and agricultural production                      -The village community                      -Pages 196- 205</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Read the theme carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What were the major sources for the agrarian history of the Sixteenth and early Seventeenth Centuries?</li> <li>2. What was Jins-i-Kamil?</li> <li>3. Mention the three constituents of the village community.</li> <li>4. Discuss the ways in which Panchayats and village headman regulated rural society.</li> <li>5. To what extent do you think caste was a factor in influencing social and economic relations in agrarian society?</li> </ol>



<p>-will be able to know about the life of women and their parts played in the agrarian society.</p> <p>-will be able to understand the relationship of the forest dwellers and the Mughal States.</p>	<p><b>Theme 8: Peasants, Zamindars and the States</b></p> <p>-Women in agrarian society.</p> <p>-The different tribes/people living in the forest.</p> <p>-Pages 206-211</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>Read the chapter carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What kind of work did women do in the fields in the Mughal Empire?</li> <li>2. Who were called Jangli?</li> <li>3. What peshkash was expected from the people?</li> <li>4. Describe the role played by women in agricultural production.</li> <li>5. How were the lives of forest dwellers transformed in the Sixteenth and Seventeenth Centuries?</li> </ol>
<p>-will be able to understand the agricultural, the common occupation of peasants and Zamindars, their relationship, co-operation, competition and conflict.</p> <p>-will be able to know and list the income and the various steps taken by the state.</p>	<p><b>Theme 8: Peasants, Zamindars and the States</b></p> <p>-The Zamindars- the landed proprietors.</p> <p>-The Land Revenue System.</p> <p>-Documents- The Ain-I-Akbari of Abul Fazl.</p> <p>- Pages 211-217</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>Read the chapter carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Mention two factors for enjoying social and economic privileges by the Zamindars in the Mughal Empire.</li> <li>2. Mention the factors that brought stability in the silver currency during the Sixteenth and Seventeenth Centuries.</li> <li>3. Discuss any two limitations of Ain-I-Akbari.</li> <li>4. “Revenue was the economic mainstay of the Mughal Revenue”. Explain the statement in the context of agriculture and trade.</li> </ol>

<p>- will be able to recall the earlier readings and understand what colonial rule meant to those who lived in the countryside</p> <p>-will be able to acquire knowledge of how colonialism affected Zamindars, Peasants and Artisans.</p> <p>-will be able to list important terms and concepts.</p>	<p style="text-align: center;"><b>NCERT TEXTBOOK</b></p> <p style="text-align: center;"><b>Themes in Indian History-Part III</b></p> <p style="text-align: center;">Theme 10 Colonialism and the countryside :</p> <p>-Exploring Official Archives Sources that can be consulted to find out answers to the suggestive activities.</p> <p>2.2 The Santhals : Pioneer Setlers - pages 270 - 272</p> <p>3. A revolt in the Countryside: The Bombay Deccan. - pages 275-276</p> <p>3.4 Then came the Cotton boom. - pages 279 - 281</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>Read the chapter carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Answer important terms of the following with the help of textbook.           <ol style="list-style-type: none"> <li>(a) Raja</li> <li>(b) Taluqdar</li> <li>(c) Benami</li> <li>(d) Aquatint.</li> <li>(e) Sahukar</li> <li>(f) Rentier</li> </ol> </li> <li>2. Why did the Santhals rebel against the British rule?</li> <li>3. What explain the anger of the Deccan ryots against the Money lenders?</li> <li>4. How did American Civil War (1861-1865) affect the lives of ryots in India?</li> </ol>
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**Subject : SOCIOLOGY Class –XI**

<b>Expected Level of Competency/ Learning Outcomes</b>	<b>Sources / Resources</b>	<b>Week-wise suggestive activities (to be guided by Teacher)</b>
The learner will be able to understand the different aspects of Culture.	NCERT Textbook for Sociology Class-XI  Introducing Sociology  Chapter – 4 Culture and Socialisation	<u>WEEK – 17</u> Read the chapter from pages 66 to 69 and answer the following questions : 1. Explain Cognitive aspects of Culture. (4) 2. Write a note on the Normative aspects of Culture. (4)
The learner will be able to learn and understand the different cultures and material culture.	NCERT Textbook for Sociology Class-XI  Introducing Sociology  Chapter – 4 Culture and Socialisation	<u>WEEK – 18</u> Read the chapter from pages 70 to 73 and answer the following questions : 1. What is sub-culture ? (2) 2. What is cultural evolutionism (2) 3. What are the material aspects of culture ? (4)
The learner will be able to learn and understand Socialisation and the role of family in Socialisation.	NCERT Textbook for Sociology Class XI  Introducing Sociology  Chapter – 4 Culture and Socialisation	<u>WEEK – 19</u> Read the chapter from page 73 to 78 and answer the following questions : 1. What is Socialisation ? (2) 2. What is social role ? (2) 3. What a note on the role of family in Socialisation ? (2)
The learner will be able to understand the social changes that took place in the society.	NCERT Textbook for Sociology Class XI  Understanding Society  Chapter – 2  Social Change and Social Order in Rural and Urban Society	<u>WEEK – 20</u> Read the chapter from page 23 to 28 and make notes on the following : 1. What are some kinds of changes brought by technology and economy ? (6) 2. How is social change to be distinguished from other kinds of change ? (4)
The learner will be able to understand : • the meaning of social facts and social action.  • class struggle and division of labour.	NCERT Textbook for Sociology Class XI Understanding Society  Chapter – 4  Introducing Western Sociologists	<u>WEEK – 21</u> Read the chapter from page 78 to 80 and answer the following questions : 1. What is social action ? (2) 2. What is social facts ? (2) 3. Why do classes come into conflict, according to Marx? (6)

**Subject : SOCIOLOGY Class - XII**

<b>Expected Level of Competency / Learning Outcomes</b>	<b>Sources / Resources</b>	<b>Week-wise suggestive activities (to be guided by Teacher)</b>
<p>The learner will be able to understand :</p> <ul style="list-style-type: none"> <li>Globalisation - interlinking of Local, Regional, National and International Market.</li> </ul>	<p>NCERT Textbook for Sociology Class XII</p> <p>Indian Society</p> <p>Chapter - 4 The Market as a Social Institution</p>	<p><u>WEEK – 17</u></p> <p>Read the chapter from pages 73 to 78. and answer the following questions :</p> <ol style="list-style-type: none"> <li>What is a status symbol ? (2)</li> <li>What are some of the processes included under the label ‘globalisation’ ? (4)</li> </ol>
<p>The learner will be able to understand :</p> <ul style="list-style-type: none"> <li>The pattern of Social Inequality and Social Exclusion.</li> </ul>	<p>NCERT Textbook for Sociology Class XII</p> <p>Indian Society</p> <p>Chapter - 5 Pattern of Social Inequality and Exclusion</p>	<p><u>WEEK – 18</u></p> <p>Read the chapter from pages 82 to 87 and answer the following questions :</p> <ol style="list-style-type: none"> <li>What is prejudice ? (2)</li> <li>What is stratification ? (2)</li> <li>What is stereotype ? (2)</li> <li>How is social inequality different from the inequality of individual? (4)</li> </ol>
<p>The learner will be able to understand :</p> <ul style="list-style-type: none"> <li>the caste system as a discriminatory system.</li> <li>untouchability.</li> <li>state and non-state initiatives addressing caste and tribe discrimination.</li> </ul>	<p>NCERT Textbook for Sociology Class XII</p> <p>Indian Society</p> <p>Chapter - 5 Pattern of Social Inequality and Exclusion</p>	<p><u>WEEK – 19</u></p> <p>Read the chapter from pages 87 to 95 and answer the following questions :</p> <ol style="list-style-type: none"> <li>Who coined the term ‘Harijan’? (1)</li> <li>What is the literal meaning of dalit ? (1)</li> <li>Write note on ‘untouchability’. (4)</li> </ol>
<p>The learner will be able to understand :</p> <ul style="list-style-type: none"> <li>the status of the Other Backward Classes and the struggle of the Adivasis.</li> </ul>	<p>NCERT Textbook for Sociology Class XII</p> <p>Indian Society</p> <p>Chapter - 5 Pattern of Social Inequality and Exclusion</p>	<p><u>WEEK – 20</u></p> <p>Read the chapter from pages 96 to 100 and answer the following questions :</p> <ol style="list-style-type: none"> <li>Write the full form of OBC. (1)</li> <li>What are the major concerns to Adivasis today ? (6)</li> </ol>
<p>The learner will be able to understand :</p> <ul style="list-style-type: none"> <li>the struggle for women’s equality and Rights.</li> <li>the struggles of the differently Aabled.</li> </ul>	<p>NCERT Textbook for Sociology Class XII</p> <p>Indian Society</p> <p>Chapter - 5 Pattern of Social Inequality and Exclusion</p>	<p><u>WEEK – 21</u></p> <p>Read the chapter from pages 101 to 110 and answer the following questions :</p> <ol style="list-style-type: none"> <li>Who wrote ‘Stree Purush Tulana’? (1)</li> <li>Who founded the Satyashodak Samay ? (1)</li> <li>What are the major issues taken up by the women’s movement over its history ? (6)</li> </ol>

**Subject : EDUCATION Class – XI**

<b>Expected Level of Competency / Learning Outcomes</b>	<b>Source / Resource</b>	<b>Week-wise suggestive activities (to be guided by Teachers)</b>
The Learner should be able to develop a proper set of values- Social, Moral, Spiritual and other Values	A Book of Education for Beginners - Bhatia & Bhatia Unit - VII	<u>WEEK – 17</u> Q.1 What are social values? (2) Q.2 Write any 4 strategies for inculcating social values? (4)
To provide students with a clear purpose on which to focus their learning efforts.	A Book of Education for Beginners - Bhatia & Bhatia Unit – VIII	<u>WEEK – 18</u> Q.1 What is measurement? (3) Q.2 What is Evaluation? (5)
To provide students with a clear purpose on which to focus their learning efforts.	A Book of Education for Beginners - Bhatia & Bhatia Unit – VIII	<u>WEEK – 19</u> Q.1 Write the differences between measurement and evaluation. (6)
To provide students with a clear purpose on which to focus their learning efforts.	A Book of Education for Beginners - Bhatia & Bhatia Unit – VIII	<u>WEEK – 20</u> Q.1 Explain the formative approach to evaluation. (6)
To provide students with a clear purpose on which to focus their learning efforts.	A Book of Education for Beginners - Bhatia & Bhatia Unit – VIII	<u>WEEK – 21</u> Q.1 Explain the summative approach to evaluation. (6)

**Subject : EDUCATION Class – XII**

Expected Level of Competency / Learning	Source / Resources	Week-wise suggestive activities (to be guided by Teachers)
The Learners will develop better understanding of the terms Mental Health and Hygiene, in order to provide opportunity to develop his/her potentialities to the maximum.	<p align="center"><u>UNIT – VIII</u></p> <p align="center">Mental Health and Adjustment (A Book of Education for Beginners – Bhatia &amp; Bhatia)</p>	<p align="center"><u>WEEK – 18</u></p> <p>Read Chapter VIII and answer the following questions :-</p> <p>Q.1 What is Mental Health? (2)</p> <p>Q.2 Enlist and explain briefly any four (4) characteristics of a mentally healthy individual. (4)</p>
The Learners will develop better understanding of the term Mental Health and Hygiene, in order to provide opportunity to develop his/her potentialities to the maximum.	<p align="center"><u>UNIT – VIII</u></p> <p align="center">Mental Health and Adjustment (A Book of Education for Beginners – Bhatia &amp; Bhatia)</p>	<p align="center"><u>WEEK – 19</u></p> <p>Q.1 Explain the meaning of adjustment. (2)</p> <p>Q.2 What is adjustment mechanism ? (2)</p> <p>Q.3 Explain : (6X1=6)</p> <p>(1) Rationalization.</p> <p>(2) Identification.</p> <p>(3) Substitution.</p> <p>(4) Repression.</p> <p>(5) Sympathism.</p> <p>(6) Day dreaming.</p>
The Learners will develop the importance of guidance and counselling in their life and education.	<p align="center"><u>UNIT – IX</u></p> <p align="center">Guidance and Counselling</p>	<p align="center"><u>WEEK – 20</u></p> <p>Q.1 What is guidance? (2)</p> <p>Q.2 Explain the three (3) types of guidance. (3)</p>
The Learners will develop the importance of guidance and counselling in their life and education.	<p align="center"><u>UNIT – IX</u></p> <p align="center">Guidance and Counselling</p>	<p align="center"><u>WEEK – 21</u></p> <p>Q.1 What is counselling? (2)</p> <p>Q.2 Explain the three (3) types of counselling? Explain them. (1+1+1+3=6)</p>

**Subject : PSYCHOLOGY Class – XI**

Expected Level of Competency/ Learning Outcome	Sources / Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>-The learner will be able to understand the nature of sensory and attention processes.</p>	<p>Psychology Textbook for CLASS – XI (NCERT Publication) CHAPTER- 5 SENSORY, ATTENTIONAL AND PERCEPTUAL PROCESSES</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Read Chapter 5: ‘Sensory, Attentional and Perceptual Processes’; Knowing the world, nature and varieties of stimulus, Sense modalities, Functional limitations of sense organs, Attentional processes sections carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What is the meaning of Psychophysics? (2)</li> <li>2. Distinguish between absolute threshold and difference threshold. (3)</li> <li>3. Explain the functional limitations of sense organs. (3)</li> <li>4. State the determinants of Selective attention. How does selective attention differ from sustained attention? (4)</li> <li>5. Define attention. Explain its properties. (6)</li> </ol>
<p>-The learner will be able to analyze the problem of form and space perception and examine the role of socio-cultural factors in perceptions.</p>	<p style="text-align: center;">- do -</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Read Chapter 5: ‘Sensory, Attentional and Perceptual Processes’; Perceptual processes, Principles of perceptual organization, Perception of space, depth and distance, Illusions and Socio-cultural influences on Perception sections carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Define perception. (2)</li> <li>2. Why do illusions occur? (2)</li> <li>3. How do socio- cultural factors influence our perceptions? (3)</li> <li>4. What are bottom-up processing and top-down processing? (3)</li> <li>5. What is the main proposition of Gestalt psychologists with respect to perception of the visual field? (3)</li> <li>6. What are the monocular cues of depth perception? Explain the role of binocular cues in the perception of depth. (6)</li> </ol>

<p>-The learner will be able to understand the nature of learning, and different forms or types of learning and the procedures used in such types of learning.</p>	<p>Psychology Textbook for CLASS – XI (NCERT Publication) CHAPTER- 6 LEARNING</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>Read Chapter 6: ‘Learning’, ‘Nature of learning, Paradigms of learning, Determinants of Operant Conditioning, Key learning processes and Observational learning sections carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What is learning? What are its distinguishing features? (3)</li> <li>2. Define reinforcer. What are the different types of reinforcers? (3)</li> <li>3. How can you distinguish between generalization and discrimination? (3)</li> <li>4. What is observational learning? Write the three forms of learning under observational learning. (4)</li> <li>5. How does classical conditioning demonstrate learning by association? (6)</li> </ol>
<p>-The learner will be able to explain the determinants of learning and learning disabilities.</p>	<p style="text-align: center;">-do-</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>Read Chapter 6: ‘Learning’, ‘Verbal learning, Skill Factors facilitating learning and Learning disabilities’ sections carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Define dyslexia. (2)</li> <li>2. Why is motivation a prerequisite for learning? (3)</li> <li>3. What is verbal learning? Explain the methods used in verbal learning. (4)</li> <li>4. What is a skill? What are the stages through which skill learning develops? (4)</li> <li>5. How can we identify students with learning disabilities? (6)</li> </ol>



<p>-The learner will be able to understand the nature of memory and distinguish between different types of memories.</p>	<p>Psychology Textbook for CLASS – XI (NCERT Publication) CHAPTER- 7 HUMAN MEMORY</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>Read Chapter 7: ‘Human Memory’, ‘Nature of memory, Memory systems: Sensory, short-term and Long-term memory, Levels of processing and types of long-term memory’ sections carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What is the meaning of the terms- encoding, storage and retrieval? (3)</li> <li>2. How are maintenance rehearsals different from elaborative rehearsals? (3)</li> <li>3. How does information travel from one place to another as proposed by Atkinson and Shrifin? (3)</li> <li>4. Differentiate between declarative and procedural memories. (4)</li> <li>5. How is information processed through sensory, short-term and long-term memory systems? (6)</li> </ol>
<p>The learner will be able to understand the constructive processes in memory, the causes and nature of forgetting and learn the strategies for improving memory.</p>	<p style="text-align: center;">-do-</p>	<p style="text-align: center;"><u>WEEK – 22</u></p> <p>Read Chapter 7: ‘Human Memory’, ‘Memory as a constructive process, Nature and causes of forgetting and Enhancing memory’ sections carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Define Mnemonics. (2)</li> <li>2. What evidence do we have to say that ‘memory is a constructive process’? (3)</li> <li>3. How is retrieval related forgetting different from forgetting due to interference? (3)</li> <li>4. Define forgetting. Why does forgetting take place? (4)</li> <li>5. Suggest a plan to improve your own memory. (6)</li> </ol>

**Subject : PSYCHOLOGY Class – XII**

<b>Expected Level of Competency / Learning Outcomes</b>	<b>Sources / Resources</b>	<b>Week-wise suggestive activities (to be guided by teachers)</b>
<p>The learner will be able to understand the nature, goals, approaches of psychotherapy.</p>	<p>Psychology textbook for class 12 (NCERT Publication) Chapter-5 : Therapeutic Approaches</p>	<p style="text-align: center;"><u>WEEK — 17</u></p> <p>Read Chapter-5 : Therapeutic Approaches – Nature, approaches and goals of psychotherapy carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What is psychotherapy? (2)</li> <li>2. What are the two (2) major components of therapeutic alliance? (2)</li> <li>3. State the four (4) characteristics of psychotherapeutic approaches. (4)</li> <li>4. Write down any eight (8) goals of psychotherapy. (4)</li> </ol>
<p>The learner will be able to identify different types of therapies, ethics in psychotherapy and explore how people with mental disorders can be rehabilitated.</p>	<p>Psychology textbook for class 12 (NCERT Publication) Chapter – 5: Therapeutic Approaches</p>	<p style="text-align: center;"><u>WEEK — 18</u></p> <p>Read Chapter 5: Therapeutic Approaches : Type of therapies, ethics in psychotherapy and rehabilitation of the mentally ill carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Write down the ethics in psychotherapy. (3)</li> <li>2. What are the techniques used in the rehabilitation of the mentally ill? (3)</li> <li>3. Which therapy encourages the client to seek personal growth and actualise their potential? Write about any two therapies. (6)</li> </ol>
<p>The learner will be able to understand the nature, formation and types of groups.</p>	<p>Psychology textbook for class 12 (NCERT Publication) Chapter – 7: Social Influence and Group Processes</p>	<p style="text-align: center;"><u>WEEK — 19</u></p> <p>Read chapter 7: Social influence and group processes: Nature, formation and type of groups carefully and answer the following questions</p> <ol style="list-style-type: none"> <li>1. Define group. (2)</li> <li>2. Compare and contrast primary and secondary groups. (3)</li> <li>3. Explain Tuckman’s stages of group formation. (4)</li> <li>4. Why do people join groups? (6)</li> </ol>

<p>The learner will be able to understand group polarisation, social loafing and identify the factors that determine cooperation and competition.</p>	<p>Psychology textbook for class 12 (NCERT Publication) Chapter – 7: Social Influences and Group Processes</p>	<p style="text-align: center;"><u>WEEK — 20</u></p> <p>Read chapter 7: Social influence and group processes: Social loafing, group polarisation, cooperation and competition carefully and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What is group polarisation? (2)</li> <li>2. What factors determine whether people will cooperate or compete? Discuss. (3)</li> <li>3. What is social loafing? How can you reduce social loafing in groups? (2+4=6)</li> </ol>
<p>The learner will be able to understand the significance of developing observational skills, and identify its advantages and disadvantages.</p>	<p>Psychology textbook for class 12 (NCERT Publication) Chapter 9: Developing Psychological Skills</p>	<p style="text-align: center;"><u>WEEK — 21</u></p> <p>Read chapter 9: Developing Psychological Skills: The introduction, developing as an effective psychologist, general skills and observational skills carefully and answer the following questions.</p> <ol style="list-style-type: none"> <li>1. What is meant by the term ‘client’ in Psychology? (2)</li> <li>2. Define skill. (2)</li> <li>3. Differentiate between naturalistic observation and participant observation. (3)</li> <li>4. List out the advantages and disadvantages of observation. (4)</li> </ol>
<p>The learner will be able to understand the nature and process of counselling.</p>	<p>Psychology Textbook for class 12 (NCERT Publication) Chapter 9 : Developing Psychological Skills</p>	<p style="text-align: center;"><u>WEEK – 22</u></p> <p>Read chapter 9 : Developing Psychological Skills: Counselling Skills carefully and answer the following questions</p> <ol style="list-style-type: none"> <li>1. Describe the four characteristics of an effective counsellor. (4)</li> <li>2. What are the ethical considerations in client – counsellor relationship? (4)</li> <li>3. Define counselling. State any four elements of counselling. (2+4=6)</li> </ol>

**Subject: COMPUTER SCIENCE CLASS – XI**

Expected Level of Competency/Learning Outcomes	Source/Resource	Week-wise suggested activities (to be guided by Teachers)
<p>The learner understands</p> <ul style="list-style-type: none"> <li>• The concept of sorting</li> <li>• Two popular sorting methods – bubble sort and insertion sort.</li> </ul>	<p>Computer Science with Python for Class XI by Sumita Arora <b>Chapter 14</b></p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ul style="list-style-type: none"> <li>• Understanding sorting</li> <li>• Introduction to sorting</li> <li>• Bubble sort in linear list</li> <li>• Insertion Sort in linear list</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Write a python program to implement bubble sort</li> <li>• Write a python program to implement insertion sort</li> </ul>
<p>The learner will be able to explain</p> <ul style="list-style-type: none"> <li>• Cyber safety</li> <li>• Methods of identity protection and safety while browsing.</li> </ul>	<p>Computer Science with Python for Class XI by Sumita Arora <b>Chapter 15</b></p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ul style="list-style-type: none"> <li>• Introduction to cyber safety</li> <li>• Safety while browsing the web</li> <li>• Identity protection while using internet</li> <li>• Many ways website track you</li> <li>• Private browsing and anonymous</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Using your favorite browser, visit any website using normal mode and private mode and identify the difference.</li> </ul>
<p>The learner will be able to know and understand</p> <ul style="list-style-type: none"> <li>• Confidentiality</li> <li>• Different types of cybercrimes such as cyber trolls, bullying, stalking, frauds, scams, etc. including how to report the cybercrimes.</li> </ul>	<p>Computer Science with Python for Class XI by Sumita Arora <b>Chapter 15</b></p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ul style="list-style-type: none"> <li>• What is confidentiality?</li> <li>• Cyber trolls and bullying</li> <li>• Cyber bullying</li> <li>• Cyber stalking</li> <li>• Spreading rumours online</li> <li>• Online fraud</li> <li>• Information theft</li> <li>• Scams</li> <li>• Illegal downloads</li> <li>• Child pornography</li> <li>• Reporting cybercrime.</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Describe the different types of online frauds and scams and how to prevent from it.</li> </ul>

<p>The learner will be able to describe</p> <ul style="list-style-type: none"> <li>• Computer forensics, cyber laws and IT acts</li> <li>• Common social networking sites</li> <li>• Social media etiquettes.</li> </ul>	<p>Computer Science with Python for Class XI by Sumita Arora <b>Chapter 15</b></p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ul style="list-style-type: none"> <li>• Introduction to computer forensics</li> <li>• Cyber Law and IT Act</li> <li>• Common Social and Networking sites</li> <li>• Appropriate usage of social networks</li> <li>• Social media etiquettes</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• What are different cyber crimes related to social networking and the punishments as per IT Act 2000?</li> </ul>
<p>The learner will be able to understand</p> <ul style="list-style-type: none"> <li>• Computer security and threats</li> <li>• Different types of viruses and attacks</li> <li>• Solutions to those threats</li> </ul>	<p>Computer Science with Python for Class XI by Sumita Arora <b>Chapter 16</b></p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ul style="list-style-type: none"> <li>• Introduction to computer security</li> <li>• Computer viruses: worms and trojan horses</li> <li>• Spyware and Adware</li> <li>• Spamming</li> <li>• PC intrusion</li> <li>• Eavesdropping</li> <li>• Phishing and Pharming</li> <li>• Solutions to computer security threats</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Explain the different solutions available to prevent from computer viruses and threats.</li> </ul>

**Subject: COMPUTER SCIENCE CLASS – XII**

Expected Level of Competency/Learning Outcomes	Source/Resource	Week-wise suggested activities (to be guided by Teachers)
<p>The learner will be able to recall</p> <ul style="list-style-type: none"> <li>• Python functions and its types</li> <li>• Types of arguments and return values</li> <li>• Scope of variables</li> <li>• Mutable or immutable properties</li> </ul>	<p>Computer Science with Python for Class XII by Sumita Arora <b>Chapter 3</b></p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ul style="list-style-type: none"> <li>• Creating and invoking a function</li> <li>• Types of Python function</li> <li>• Parameters passing and types of arguments</li> <li>• Returning values from a function</li> <li>• Composition and scope of variables</li> <li>• Mutable / Immutable properties of passed data objects</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Write python programs to demonstrate different types of arguments, return values and scope of variables.</li> </ul>
<p>The learner will be able to</p> <ul style="list-style-type: none"> <li>• Gain deeper understanding of python modules and python library</li> <li>• generate and employ python libraries.</li> </ul>	<p>Computer Science with Python for Class XII by Sumita Arora <b>Chapter 4</b></p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ul style="list-style-type: none"> <li>• Python libraries and module</li> <li>• Using Python mathematical functions</li> <li>• Python built-in string functions such as join, split, replace, etc.</li> <li>• Clearing variables from previous program run</li> <li>• Creating and using a python library</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Write python programs to demonstrate the usage of mathematical, string and random functions including custom library created by you.</li> </ul>
<p>The learner will revise</p> <ul style="list-style-type: none"> <li>• The concepts of files and different methods for working with files</li> <li>• File modes and pointers including standard input, output and error streams.</li> </ul>	<p>Computer Science with Python for Class XII by Sumita Arora <b>Chapter 5</b></p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ul style="list-style-type: none"> <li>• Data files – text files and binary files</li> <li>• File access modes</li> <li>• Working with text files - writing, appending and reading</li> <li>• The flush( ) function</li> <li>• File modes and file pointers</li> <li>• Standard input, output and error streams</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Write programs in python to demonstrate working with text files using different modes.</li> </ul>

<p>The learner will be able to update their knowledge in</p> <ul style="list-style-type: none"> <li>• Binary file handling</li> <li>• Searching and updating binary files</li> <li>• Working with CSV files</li> </ul>	<p>Computer Science with Python for Class XII by Sumita Arora <i>Chapter 5</i></p>	<p><u>WEEK – 20</u></p> <ul style="list-style-type: none"> <li>• Working with binary files – serialization and unpickling</li> <li>• Creating, opening, closing binary files</li> <li>• Reading or unpickling binary files</li> <li>• Searching and updating a binary file</li> <li>• Working with CSV files – opening, closing, writing</li> <li>• Reading CSV files</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Write python programs to work with binary files</li> <li>• Write python programs to demonstrate working with CSV files.</li> </ul>
<p>The learner will be able to understand</p> <ul style="list-style-type: none"> <li>• Recursion and how to implement using Python.</li> <li>• Recursive binary search</li> <li>• Recursion versus iteration</li> </ul>	<p>Computer Science with Python for Class XII by Sumita Arora <i>Chapter 6</i></p>	<p><u>WEEK – 21</u></p> <ul style="list-style-type: none"> <li>• How recursive function works?</li> <li>• What happen when recursive method never reaches a base case?</li> <li>• Recursion in Python</li> <li>• Some recursive codes in Python</li> <li>• Binary search using recursive method</li> <li>• Comparison of recursion versus iteration</li> </ul> <p><b>Assignments / Activities</b></p> <ul style="list-style-type: none"> <li>• Write recursive programs for binary search and finding Fibonacci series.</li> </ul>

**Subject : HOME SCIENCE CLASS – XI**

<b>Expected Level of Competency/Learning Outcomes</b>	<b>Source/Resource</b>	<b>Week-wise suggested activities (to be guided by teachers)</b>
<p>The student will be able to understand - classification and characteristics of management resources</p>	<p>Class XI : Home Science Textbook, Human ecology and family sciences by NCERT, Chapter – 4, Management of Resources.</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Read the portion given carefully and answer the following questions-</p> <p>i) Write the different classification of resources. ii) What are the characteristics of resources?</p>
<p>The student will be able to learn and understand - nutrition, health and well being</p>	<p>Class XI : Home Science Textbook, Human ecology and family sciences by NCERT, Chapter – 12, Nutrition, Health &amp; Well being</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Read the portion given carefully and answer the following questions-</p> <p>i) What are the dietary requirements of infants? ii) Write the immunization schedule of children.</p>
<p>The learner will be able to learn and explain– -care and maintenance of fabrics</p>	<p>Class XI : Home Science Textbook, Human ecology and family sciences by NCERT, Chapter – 17, Care and Maintenance of fabrics</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>Read the portion given carefully and answer the following questions-</p> <p>i) What are the different techniques of stain removal? ii) Write the difference between soap and detergent.</p>
<p>The student will be able to learn and understand - -Washing -Ironing</p>	<p>Class XI : Home Science Textbook, Human ecology and family sciences by NCERT, Chapter – 17, Care and Maintenance of fabrics</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>Read the portion given carefully and answer the following questions-</p> <p>i) What is friction? ii) Differentiate between starch and stiffening agents. iii) Write the properties of wool.</p>



**Subject : HOME SCIENCE CLASS – XII**

<b>Expected Level of Competency/Learning Outcomes</b>	<b>Source/Resource</b>	<b>Week-wise suggested activities (to be guided by teachers)</b>
<p>*The learner will be able to learn and understand the meaning of fats or lipids. - understand by good food combination.</p>	<p>Class – XII Home Science textbook. Asha Das &amp; Dr Puja Gupta, Arya Book Depot. Chapter -5, Essential for meal planning.</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Read the portion given carefully and answer the following questions-</p> <p>i) What is the meaning of fats or lipids? ii) What do you understand by good food combinations? Explain with example.</p>
<p>The student will be able to know and understand -symptoms of diarrhoea - the ill effects of diabetes on the health of an individual</p>	<p>Class – XII Home Science textbook. Asha Das &amp; Dr Puja Gupta, Arya Book Depot. Chapter -8, Therapeutic modification of normal diet for common ailments.</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Read the portion given carefully and answer the following questions-</p> <p>i) Write the difference symptoms of diarrhoea. ii) Give a brief account of the ill effects of diabetes on the health of an individual.</p>
<p>The learner will be able to learn and understand– *Importance of consumer education. *Advantages of consumer education. *hoarding</p>	<p>Class – XII Home Science textbook. Asha Das &amp; Dr Puja Gupta, Arya Book Depot. Chapter -12, Consumer Education.</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>Read the portion given carefully and answer the following questions-</p> <p>1) Write the importance of consumer education. 2) Give a brief account of the advantages of consumer education. 3) What is hoarding?</p>
<p>The student will be able to understand and explain the principles of Apparel design</p>	<p>Class – XII Home Science textbook. Asha Das &amp;Dr Puja Gupta, Arya Book Depot. Chapter -15, Application of Art and principles of Design in Apparel design</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>Read the portion given carefully and answer the following questions-</p> <p>i) Give three tips on colour and design for selecting a shirt for a short and plump teenager. ii) State two effects of horizontal lines in a garment, on the appearance of the body.</p>

**Subject : GEOGRAPHY Class – XI**

Expected Level of Competency / Learning Outcomes	Source / Resource	Week-wise suggestive activities ( to be guided by Teachers)
<p><b>Learners</b> -will gain knowledge and an understanding about the oceans and the immense significance of water to man.</p>	<p>Textbook of Geography Class –XI Arya Publication. <b>PART-A</b> Chapter 14-Oceans Unit – V: water (Ocean)</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Read the chapter thoroughly and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Write the area in percentage occupied by water on the earth. (1)</li> <li>2. Write the percentage of land on the earth’s total area. (1)</li> <li>3. Name the largest ocean in the world. (1)</li> <li>4. Which ocean is named after a country? (1)</li> <li>5. Define – (1x3=3)               <ol style="list-style-type: none"> <li>i) Hydrological cycle</li> <li>ii) Transpiration</li> <li>iii) Evapotranspiration.</li> </ol> </li> <li>6. Write importance of continental shelf to man. (3)</li> <li>7. Which factors are responsible for temperature and its distribution of the ocean water? (3)</li> <li>8. Give an account on the significance of oceans. (4)</li> </ol>
<p>-will be able to understand the diversity of life on earth, ecology, ecosystem and biosphere. -will be able to know the importance of food chains. -will be held responsible for conserving the natural environment.</p>	<p>Textbook of Geography Class –XI Arya Publication. <b>PART-A</b> Chapter 16 – Diversity of Life Unit – VI: Life on Earth</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Read the chapter thoroughly and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What is biosphere? (1)</li> <li>2. What do you mean by food chain? (1)</li> <li>3. Write the four components of biosphere. (1/2x4=2)</li> <li>4. Distinguish between ecology and ecosystem. (2)</li> <li>5. Name the two main components of an ecosystem. (2)</li> <li>6. Give suggestions on how to maintain an optimal ecological balance. (3)</li> <li>7. Explain each level of food chain. (3)</li> </ol>

<p>-will be able to understand the natural environment, and develop interests in their surroundings. -will be able to appreciate the trees and their great uses to man.</p>	<p>Textbook of Geography Class –XI Arya Publication. <b>PART-B</b> Chapter 6 – Natural vegetation Unit – III: Climate, vegetation and Soil.</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>Read the chapter thoroughly and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Define the following – (1x3=3) <ol style="list-style-type: none"> <li>i) Flora</li> <li>ii) Vegetation and</li> <li>iii) Forests.</li> </ol> </li> <li>2. Suggest 4 (four) methods to conserve forests. (½x4=2)</li> <li>3. Which type of vegetation does Mizoram have? (Fig.6.1) Name at least 4 (four) trees that grow naturally in Mizoram. (1+2=3)</li> <li>4. Write the major vegetation types of India based on the classification made by H.G.Champion and modified by G.S. Puri. (1/2x6=3)</li> <li>5. Describe the uses of areas under a biosphere reserve. (3)</li> <li>6. Write the characteristic of moist tropical evergreen forest. (4)</li> <li>7. What is meant by biosphere reserves? Mention the main objective of biosphere reserves. (1+3 =4)</li> </ol>
<p>-will be able to understand the nature and formation of soils. -will be able to know the great effects of soils on settlement, population distributions, economic activities etc. -will be able to know how to prevent soil erosion.</p>	<p>1. Textbook of Geography Class –XI Arya Publication. <b>PART-B</b> Chapter 7 – Soils Unit – III: Climate, vegetation and Soil.</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>Read the chapter thoroughly and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What is Soil? (1)</li> <li>2. Define pedogenesis. (1)</li> <li>3. How is black soil formed? Which crop grows best on black soil? (1+1=2)</li> <li>4. How does fertility of soil affect settlement pattern in India? (3)</li> <li>5. Based on the division made by Indian Council of Agriculture Research (ICAR), name the major soil types of India. (3)</li> <li>6. What is soil erosion? Discuss the factors responsible for soil erosion. (1+3 =4)</li> <li>7. Suggest measures to check soil erosion. (4)</li> </ol>

<p>-will be able to understand the meaning of ecosystem, the interdependence of all organisms and their importance.</p> <p>-will gain knowledge about the different Biomes of the world and their impact on different countless cycles of all living things.</p>	<p>Textbook of Geography Class –XI Arya Publication.</p> <p><b>PART-A</b> Chapter 17 – Ecosystems Unit – VI: Life on Earth.</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>Read the chapter thoroughly and answer the following questions:</p> <ol style="list-style-type: none"> <li>1. What are biomes? (1)</li> <li>2. What is agro ecology? (1)</li> <li>3. Which aquatic animals live in fresh water? (2)</li> <li>4. Which biome contains the most varied life form on land? Describe the richness of this rich biome. (3)</li> <li>5. What do you know about marine habitat? (3)</li> <li>6. What is meant by man-made ecosystem? (3)</li> <li>7. How are grasslands called in – (a) North America (b) Europe and Asia (c) South America (d) Africa? (4)</li> </ol>
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**Subject : GEOGRAPHY Class – XII**

<b>Expected Level of Competency / Learning Outcomes</b>	<b>Source / Resource</b>	<b>Week-wise suggestive activities ( to be guided by Teachers)</b>
<p><b>Students will learn and understand:</b></p> <p>a) The meaning of manufacturing industries</p> <p>b) Factors that influence the location of industries</p> <p>c) Impact of liberalization, privatization and globalization on location of industries.</p>	<p>Textbook Of Geography- Class XII Arya Publications &amp; Internet</p> <p><b>Part B: Chapter 17 Manufacturing Industries</b></p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p><b>Read the chapter carefully and make notes on the following:-</b></p> <ol style="list-style-type: none"> <li>1. What do you mean by manufacturing industries?</li> <li>2. Explain briefly each of the geographical and non- geographical factors that influence the location of industry.</li> <li>3. Classify industries on the basis of size.</li> <li>4. What do you mean by major industrial region?</li> <li>5. Describe in detail <i>any one of</i> the two:               <ol style="list-style-type: none"> <li>a) The Hooghly Industrial Region</li> <li>b) The Chhota-nagpur Industrial Region.</li> </ol> </li> <li>6. What do you mean by liberalization, privatization and globalization? How do they effect the location of industries?</li> </ol>
<p><b>Students will be able to understand:</b></p> <p>a) The meaning of planning</p> <p>b) Different plan periods in India</p> <p>c) meaning of sustainable development</p> <p>d) Goals and importance of sustainable development.</p>	<p>Textbook Of Geography- Class XII Arya Publications &amp; Internet</p> <p><b>Part B: Chapter 18 Planning in India and Need for Sustainable Development</b></p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p><b>Read the chapter carefully and make notes on the following:-</b></p> <ol style="list-style-type: none"> <li>1. What were the basic features of planning in India?</li> <li>2. Mention the thrust area/ main objectives of the different Five Year Plans in India.</li> <li>3. What is sustainable development? Why is Sustainable Development an ideal form of development in modern world?</li> <li>4. What are the main features of Sustainable Development?</li> </ol>
<p><b>Students will be able to understand and know:</b></p> <p>a) The importance of different transport systems in India</p> <p>b) Factors of development of railways and roads</p> <p>c) Meaning of inland waterways, factors of inland water development</p>	<p>Textbook Of Geography- Class XII Arya Publications &amp; Internet</p> <p><b>Part B:Chapter 19 Transport Systems (in India)</b></p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p><b>Read the chapter carefully and make notes on the following:-</b></p> <ol style="list-style-type: none"> <li>1. Explain in detail: “Transport plays an important role in strengthening the social, political and economic unity of India” by giving three reasons.</li> <li>2. State the different gauges of Indian Railways.</li> <li>3. Explain briefly the factors affecting the pattern of railways in India.</li> <li>4. Explain any one of the following:               <ol style="list-style-type: none"> <li>a) Railway network is dense in the North Indian Plain.</li> <li>b) Railway network is sparse in hilly / the Himalayan Region.</li> </ol> </li> </ol>

<p>d) Gauges of railways, road types pipelines, and power grids.</p> <p>e) Meaning of mass communication and mass communication media.</p>		<p>5. What are the different types of roads in India? State the agencies/ departments which are responsible for the construction and maintenance of different roads in India.</p> <p>6. What is inland water transport? What are the problems of inland water transport in India?</p> <p>7. What is meant by mass communication? Classify mass communication media into different category.</p>
<p><b>Students will be able to understand and know:</b></p> <p>a) The trend of India's exports and imports.</p> <p>b) Types of sea ports and air ports.</p> <p>c) Air transport operators and airports in India</p>	<p>Text book Of Geography- Class XII Arya Publications</p> <p>&amp;</p> <p>Internet</p> <p><b>Part B:Chapter 20 International trade, Sea ports and Airports</b></p>	<p><u>WEEK – 20</u></p> <p><b>Read the chapter carefully and make notes on the following:-</b></p> <p>1. State the nature of India's exports and imports since independence in 1947.</p> <p>2. What is a port? How is it different from a harbor?</p> <p>3. What are the different categories of airports in India?</p> <p>4. Which is the highest authority in the operation of airlines and management of airports in India?</p>
<p><b>Students will be able to know and understand:</b></p> <p>a) The meaning of environmental pollution and the associated terms</p> <p>b) Effects and control measures of different types of pollution.</p> <p>c) Causes of poverty and remedies</p> <p>d) Urban environmental problems with special reference to slums and solid wastes.</p> <p>e) Meaning of noise pollution and its effect</p> <p>f) Causes of poverty and its remedies</p> <p>g) Urban environmental problems with special reference to slums and solid wastes.</p>	<p>Text book Of Geography- Class XII Arya Publications</p> <p>&amp;</p> <p>Internet</p> <p>Part B:Chapter 21 Geographical Perspectives on Selected Issues and Problems</p>	<p><u>WEEK – 21</u></p> <p><b>Read the chapter carefully and make notes on the following:-</b></p> <p>1. What do you mean by environmental pollution?</p> <p>2. What are the sources of air pollution? Mention the different type of air pollutants.</p> <p>3. What do you mean by green house effect?</p> <p>4. What is acid rain?</p> <p>5. Write a note on any one: (a) effects of air pollution or (b) control measures of air pollution.</p> <p>6. What is water pollution? What are the sources of water pollution?</p> <p>7. What is noise pollution? State how it affects human health.</p> <p>8. What are the causes of poverty and hunger in India? Suggest measures to remove poverty in India.</p> <p>9. Explain how urbanization affects urban environmental problems with special reference to slums.</p>

**Subject : ECONOMICS Class – XI**

Expected level of Competency / Learning Outcomes	Sources/ Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>The learner will be able to</p> <ul style="list-style-type: none"> <li>- identify the sources of data</li> <li>- develop skills to collect statistical data</li> </ul>	<p><b>STATISTICS FOR ECONOMICS</b></p> <p>CHAPTER – 2 Collection of Data</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Read the topics carefully and answer the following questions</p> <ol style="list-style-type: none"> <li>1. Differentiate between Primary data and Secondary data.</li> <li>2. Mention the two important sources of secondary data.</li> <li>3. Suppose you want to collect statistical information relating to literacy rate in your locality. Which mode of data collection will you prefer to adopt? Give reasons to support your answer.</li> </ol>
<p>The learner</p> <ul style="list-style-type: none"> <li>- understands the meaning of cost</li> <li>- identifies the relationship between               <ul style="list-style-type: none"> <li>– AC and MC</li> <li>TC and MC</li> </ul> </li> </ul>	<p><b>INTRODUCTORY MICROECONOMICS</b></p> <p>CHAPTER – 6 Concept of Costs</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>1. Give the meaning of cost.</li> <li>2. Define production cost.</li> <li>3. Explain the relationship between AC and MC with the help of a diagram.</li> </ol>
<p>The learner will be able to</p> <ul style="list-style-type: none"> <li>- distinguish between census and sample surveys</li> <li>- know the different techniques of sampling</li> </ul>	<p><b>STATISTICS FOR ECONOMICS</b></p> <p>CHAPTER - 3 Census and Sample Methods of collection of Data</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>Read the topics carefully and answer the following questions.</p> <ol style="list-style-type: none"> <li>1. Compare the census and sample methods of collecting data with reference to reliability, time involved and cost.</li> <li>2. Describe the various methods of sampling.</li> </ol>
<p>The learner</p> <ul style="list-style-type: none"> <li>- understands the meaning of revenue</li> <li>- identifies AR, MR and TR</li> <li>- will be able to construct revenue curves under Monopoly, Monopolistic competition and Perfect Competition</li> </ul>	<p><b>INTRODUCTORY MICRO ECONOMICS</b></p> <p>CHAPTER – 7 Concept of Revenue</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>1. Define Revenue.</li> <li>2. Define MR.</li> <li>3. Which concept of revenue is called price?</li> <li>4. Discuss the relationship between AR and MR.</li> <li>5. Draw the curves of AR and MR under monopoly market.</li> </ol>

<p>The learner will be able to</p> <ul style="list-style-type: none"> <li>- construct and interpret different types of statistical diagrams</li> </ul>	<p><b>STATISTICS FOR ECONOMICS</b></p> <p>CHAPTER – 6 Diagrammatic Presentation of Data: Bar Diagrams and Pie diagrams</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ol style="list-style-type: none"> <li>1. Present the marks you have secured in HSLC Examination in the form of a simple bar diagram.</li> <li>2. Present the data in the form of a sub-divided bar diagram <table border="1" data-bbox="868 423 1417 539"> <thead> <tr> <th>Year</th> <th>Wheat</th> <th>Rice</th> <th>Gram</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td>30</td> <td>20</td> <td>10</td> <td>60</td> </tr> <tr> <td>2012</td> <td>45</td> <td>30</td> <td>15</td> <td>90</td> </tr> </tbody> </table> </li> <li>3. Present the information in the form of a Pie diagram <table border="1" data-bbox="876 687 1417 965"> <thead> <tr> <th>Items</th> <th>Percentage Expenditure</th> </tr> </thead> <tbody> <tr> <td>Labour</td> <td>25</td> </tr> <tr> <td>Bricks</td> <td>15</td> </tr> <tr> <td>Cement</td> <td>20</td> </tr> <tr> <td>Steel</td> <td>15</td> </tr> <tr> <td>Timber</td> <td>10</td> </tr> <tr> <td>Supervision</td> <td>15</td> </tr> </tbody> </table> </li> </ol>	Year	Wheat	Rice	Gram	Total	2011	30	20	10	60	2012	45	30	15	90	Items	Percentage Expenditure	Labour	25	Bricks	15	Cement	20	Steel	15	Timber	10	Supervision	15
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<p>The learner</p> <ul style="list-style-type: none"> <li>- understands the meaning of supply</li> <li>- identifies the relationship between supply and price</li> <li>- identifies determinants of supply and their impact on the supply of commodity</li> </ul>	<p><b>INTRODUCTORY MICROECONOMICS</b></p> <p>CHAPTER – 9 Theory of Supply</p>	<p style="text-align: center;"><u>WEEK – 22</u></p> <ol style="list-style-type: none"> <li>1. State the law of supply.</li> <li>2. Explain the effect of change in technology on the supply of goods.</li> <li>3. Give a summary on the supply of vegetables and other essential commodities in your locality due to pandemic crisis.</li> </ol>																													
<p>The learner will be able to</p> <ul style="list-style-type: none"> <li>- understand the nature and degree of relationship between two variables</li> <li>- apply different methods for calculating correlation</li> </ul>	<p><b>STATISTICS FOR ECONOMICS</b></p> <p>CHAPTER – 12 Correlation</p>	<p style="text-align: center;"><u>WEEK – 23</u></p> <p>Read the topics thoroughly and answer the following questions :</p> <ol style="list-style-type: none"> <li>1. What are the different degrees of correlation?</li> <li>2. What is a scattered diagram?</li> <li>3. Calculate Karl Pearson's coefficient of correlation between the age and weight of children.</li> </ol> <table border="1" data-bbox="901 1818 1378 1901"> <tbody> <tr> <td>Age</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Weight</td> <td>3</td> <td>4</td> <td>6</td> <td>7</td> <td>10</td> </tr> </tbody> </table>	Age	1	2	3	4	5	Weight	3	4	6	7	10																	
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<p>The learner</p> <ul style="list-style-type: none"> <li>- understands the meaning of market</li> <li>- Identifies the feature of perfect competition, monopoly, monopolistic competition,</li> <li>- understands different concepts relating to market equilibrium</li> </ul>	<p style="text-align: center;"><b>INTRODUCTORY MICRO ECONOMICS</b></p> <p>CHAPTER – 10 Forms of market</p> <p>CHAPTER – 11 Market Equilibrium: Price Determination under Perfect Competition</p>	<p style="text-align: right;"><u>WEEK – 24</u></p> <p style="text-align: center;">Power points</p> <ul style="list-style-type: none"> <li>* Perfect competition</li> <li>* Monopoly</li> <li>* Monopolistic competition</li> </ul> <p style="text-align: center;">Power points</p> <ul style="list-style-type: none"> <li>* Market equilibrium</li> <li>* Equilibrium price</li> <li>* Effect of change in demand</li> <li>* Effect of change in supply</li> </ul>
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Expected level of Competency / Learning Outcomes	Sources/ Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>The learner will</p> <ul style="list-style-type: none"> <li>- comprehend the different attributes of poverty and the diverse dimensions relating to the concept of poverty</li> </ul>	<p><b>INDIAN ECONOMIC DEVELOPMENT</b></p> <p>Chapter – 7 Poverty</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Read the topics carefully and try to answer the following questions</p> <ol style="list-style-type: none"> <li>1. What is Poverty?</li> <li>2. Give a critical assessment of Poverty Alleviation Programmes.</li> <li>3. Suppose you are living in an urban area and are from a poor family. You want to get help from the government to set up a petty shop. Under which scheme will you apply for assistance?</li> </ol>
<p>The learner</p> <ul style="list-style-type: none"> <li>- acknowledges the concept of aggregatedemand and its components</li> <li>- identifies the inter-relationship between income, consumption and savings</li> </ul>	<p><b>INTRODUCTORY MACRO ECONOMICS</b></p> <p>Chapter – 5 Aggregate Demand and itscomponents</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>1. What is aggregate demand?</li> <li>2. Explain saving function with the helpof schedule and diagram.</li> <li>3. What do you understand by full employment?</li> </ol>
<p>The learner will</p> <ul style="list-style-type: none"> <li>- understand the concept of humancapital, human capital formation</li> <li>- understand the link between investment in human capital and economic growth</li> </ul>	<p><b>INDIAN ECONOMIC DEVELOPMENT</b></p> <p>Chapter – 8 Human Capital Formation in India</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>Read the topics carefully and try to answer the following questions</p> <ol style="list-style-type: none"> <li>1. Define human capital.</li> <li>2. What is meant by human capital formation?</li> <li>3. State the role of human capital formation in accelerating rate of economic growth.</li> <li>4. Explain the principal difficulties in theprocess of human capital formation.</li> </ol>
<p>The learner</p> <ul style="list-style-type: none"> <li>- nterprets how equilibrium is achievedunder AS=AD approach and S=I approach</li> <li>- understands investment multiplier and its mechanism</li> </ul>	<p><b>INTRODUCTORY MACRO ECONOMICS</b></p> <p>Chapter – 6 Short Run Equilibrium Output</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>1. Define equilibrium level of output</li> <li>2. Define investment multiplier</li> <li>3. Explain determination of equilibriumlevel of output using AS=AD approach</li> </ol>

<p>The learner will</p> <ul style="list-style-type: none"> <li>- understand the basic concepts relating to employment</li> <li>- know the nature and extent of unemployment</li> <li>- identify and evaluate the current challenges facing Indian economy</li> </ul>	<p><b>INDIAN ECONOMIC DEVELOPMENT</b></p> <p>Chapter – 10 Employment and Unemployment</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>Read the topics carefully and try to answer the following questions</p> <ol style="list-style-type: none"> <li>1. What is disguised unemployment?</li> <li>2. How is unemployment a social as well as an economic problem?</li> <li>3. What is casualisation of workforce? Discuss the concept with relevant facts.</li> </ol>
<p>The learner</p> <ul style="list-style-type: none"> <li>- apprehends the meaning of money and barter system of exchange</li> <li>- identifies different functions of money</li> <li>- comprehends the difference in central and commercial banks</li> <li>- understands how these banks work as an important source of money supply in the economy</li> </ul>	<p><b>INTRODUCTORY MACRO ECONOMICS</b></p> <p>Chapter – 7 Money and Supply of Money</p> <p>Chapter – 8 Money and Banking (Page 179)</p>	<p style="text-align: center;"><u>WEEK – 22</u></p> <ol style="list-style-type: none"> <li>1. Define CC economy.</li> <li>2. What is meant by money?</li> <li>3. Explain how money removes the limitations of barter system of exchange.</li> <li>4. Define a commercial bank.</li> <li>5. Distinguish between a commercial bank and a central bank.</li> <li>6. How does the central bank control the availability of credit by open market operations?</li> </ol>
<p>The learner will</p> <ul style="list-style-type: none"> <li>- understand the concept of environment and sustainable development</li> <li>- understand the environmental problems and ways to address them</li> </ul>	<p><b>INDIAN ECONOMIC DEVELOPMENT</b></p> <p>Chapter – 11 Environment and Sustainable Development</p>	<p style="text-align: center;"><u>WEEK – 23</u></p> <p>Read the topics carefully and try to answer the following questions</p> <ol style="list-style-type: none"> <li>1. What is meant by sustainable economic development?</li> <li>2. Keeping in view your locality, describe any four strategies of sustainable development</li> </ol>
<p>The learner</p> <ul style="list-style-type: none"> <li>- understands fiscal policy and its objectives</li> <li>- identifies fiscal instruments</li> <li>- knows how and when to use these instruments</li> <li>- understands the concept of government budget</li> <li>- analyses the components of government budget</li> </ul>	<p><b>INTRODUCTORY MACRO ECONOMICS</b></p> <p>Chapter – 10 Fiscal Policy</p> <p>Chapter – 11 Government budget and the economy</p>	<p style="text-align: center;"><u>WEEK – 24</u></p> <ol style="list-style-type: none"> <li>1. What is fiscal policy?</li> <li>2. Explain the various instruments of fiscal policy.</li> <li>3. Define a government budget.</li> <li>4. What is a progressive tax?</li> <li>5. What is fiscal deficit?</li> <li>6. Differentiate between plan and non-plan expenditure.</li> <li>7. Distinguish between revenue receipt and capital receipt.</li> <li>8. What are development and non-development expenditure? Give example of each.</li> </ol>

**Subject : PUBLIC ADMINISTRATION CLASS – XI**

<b>Expected Level of Competency/Learning Outcomes</b>	<b>Sources/Resources</b>	<b>Week-wise suggestive activities (to be guided by Teacher)</b>
<p><b>The learners will be able to:</b></p> <ul style="list-style-type: none"> <li>understand the evolution, meaning and the need for Right to Information.</li> </ul>	<p>Public Administration By M Laxmikanth Chapter 5, pages 232-235</p>	<p><u>WEEK – 17</u></p> <p>Read this chapter carefully and try to answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Explain the evolution of Right to Information Act in India.</li> <li>2. What is Right to Information?</li> <li>3. Elaborate the need for Right to Information.</li> </ol>
<ul style="list-style-type: none"> <li>understand the main features of Right to Information Act</li> </ul>	<p>Public Administration By M Laxmikanth Chapter 5, pages 232-235</p>	<p><u>WEEK – 18</u></p> <p>Read this chapter carefully and try to answer the following questions:</p> <ol style="list-style-type: none"> <li>1. Mention the important features of Right to information Act.</li> <li>2. Point out important points exempted from disclosure under RTI Act.</li> </ol>
<ul style="list-style-type: none"> <li>understand the meaning and importance of Public Relation</li> </ul>	<p>Public Administration (Concept and Theories) By SP Naidu Chapter 37</p>	<p><u>WEEK – 19</u></p> <p>Read this chapter and try to answer these questions :</p> <ol style="list-style-type: none"> <li>1. What is Public Relation?</li> <li>2. Describe the importance of Public Relation.</li> </ol>
<ul style="list-style-type: none"> <li>understand the purpose and media of Public Relation</li> </ul>	<p>Public Administration (Concept and Theories) By SP Naidu Chapter 37</p>	<p><u>WEEK – 20</u></p> <p>Read this chapter and try to answer these questions :</p> <ol style="list-style-type: none"> <li>1. What are the purpose of Public Relation according to Dimock and Dimock?</li> <li>2. Explain the media of Public Relation.</li> </ol>
<ul style="list-style-type: none"> <li>understand the specific technique of Public Relation and Publicity ; Public Relation Organization in India.</li> </ul>	<p>Public Administration (Concept and Theories) By SP Naidu Chapter 37</p>	<p><u>WEEK – 21</u></p> <p>Read this chapter and try to answer these questions :</p> <ol style="list-style-type: none"> <li>1. Describe the specific technique of Public Relation and Publicity.</li> <li>2. Mention the agencies of public relation organization in India.</li> </ol>

**Subject : PUBLIC ADMINISTRATION CLASS XII**

Expected Level of Competency / Learning Outcomes	Sources / Resources	Week-wise suggestive activities (to be guided by Teacher)
* The learner will be able to understand the meaning and roles of Civil Services; All India Services, Central Services and State Civil Services.	Public Administration in India By Avasthi and Avasthi  Chapter -35 Pages 373-382	<u>WEEK – 17</u> 1. What is meant by Civil Services? 2. Explain te roles of Civil Services. 3. Distiguish between All India Services and Central Services.
* The learner will be able to understand the composition, tenure, removal/suspension, functions of the Union Public Service Commission (UPSC).	Public Administration in India By Avasthi and Avasthi  Chapter-42 Pages 434 - 440	<u>WEEK – 18</u> 1. What is the tenure of the members of the UPSC? 2. Is the Chairman and other members of the UPSC can be removed from their offices? How? 3. Briefly explain the powers and functions of the UPSC.
* The learner will be able to understand the composition, powers and functions of the Election Commission of India (ECI).	Public Administration in India By Avasthi and Avasthi  Chapter 20 Pages 255 - 257	<u>WEEK – 19</u> 1. Write down the composition of the Election Commission of India. 2. Write down the constitutional position of the Election Commission of India. 3. Briefly explain the powers and functions of the Election Commission of India.
* The learner will be able to understand the meaning of Integrity. * The learner will be able to understand the composition and functions of the Central and State Information Commission.	Public Administration By Avasthi and Maheshwari  Chapter -53 Pages 653-660	<u>WEEK – 20</u> 1. What is meant by Integrity? 2. Write down the composition of the State Information Commission. 3. Base on your understanding this chapter, explain the importance of Central Information Commission.
* The learner will be able to understand the meaning and roles of Lok Pal, Lok Ayukta and Lok Adalat..	Public Administration By Avasthi and Maheshwari  Chapter-52 Pages 640 - 648	<u>WEEK – 21</u> 1. What is Lok Pal? 2. Distinguish between Lok Pal and Lok Adalat. 3. What are the roles of Lok Pal? 4. What are the roles of Lok Adalat.

**Subject: MATHEMATICS CLASS – XI**

Expected Level of Competency/Learning Outcomes	Source/Resource	Week-wise suggested activities (to be guided by Teacher)
<p>The learner will be able to understand the meaning of domain and range and be able to visualize the graph of different trigonometric functions</p>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ol style="list-style-type: none"> <li>Find the principal solution of               <ol style="list-style-type: none"> <li><math>\text{Sin}x = -\frac{\sqrt{3}}{2}</math></li> <li><math>\text{Sec}x = \frac{2}{\sqrt{3}}</math></li> </ol> </li> <li>Draw the graph of <math>\sin x</math> and <math>\cos x</math> in the interval <math>[-2\pi, 2\pi]</math>. What is the maximum value of <math>\sin x</math> and <math>\cos x</math>.</li> <li>Draw the graph of <math>\tan x</math></li> <li>Write out trigonometric table and relate them with your graph.</li> </ol>
<p>The learner will be able to understand</p> <ul style="list-style-type: none"> <li>- the basic formula of straight lines</li> <li>- the meaning of collinearity of a line</li> <li>- and will be able to solve related problems</li> </ul>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Students are provided with basic formula of straight lines and the meaning of collinearity of a line and help them to solve the following related problems;</p> <ol style="list-style-type: none"> <li>Write the formula for finding distance between two points <math>A(x_1, y_1)</math> and <math>B(x_2, y_2)</math>. Using this, find the distance between <math>P(6, -6)</math> from origin.</li> <li>Show that <math>A(3, 2)</math>, <math>B(0, 5)</math>, <math>C(-3, 2)</math> and <math>D(0, -1)</math> are the vertices of a square</li> <li>Find the area of triangle ABC whose vertices are <math>A(-3, 5)</math>, <math>B(5, 2)</math> and <math>C(-9, -3)</math></li> <li>Using slopes, show that the points <math>(5, 1)</math>, <math>(1, -1)</math> and <math>(11, 4)</math> are collinear.</li> <li>Write the formula for equation of a line passing through two points. Show that the three points <math>(3, 0)</math>, <math>(-2, 2)</math> and <math>(8, 2)</math> are collinear.</li> </ol>

<p>The students are expected to know the various types of sections of cone i.e. circle, parabola, ellipse and hyperbola.</p> <p>After studying this lesson, the students are expected to understand the shapes and the different formula for obtaining the equations of circle, parabola, ellipse and hyperbola.</p> <p>The student understands various types of sections of cone, their vertices, axis, foci, eccentricity, major and minor axis, latus rectum etc. They are expected to apply this knowledge to solve various problems in reality.</p>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ol style="list-style-type: none"> <li>Explain:             <ol style="list-style-type: none"> <li>equation of circle in standard form,</li> <li>equation of circle when end points of a diameter are given,</li> <li>general equation of a circle.</li> </ol> </li> <li>Explain the standard equation of a parabola and their simple properties.</li> <li>Explain the standard equation of ellipse and their simple properties.</li> <li>Explain the standard equation of a hyperbola and their simple properties.</li> <li>Which is true:             <ol style="list-style-type: none"> <li><math>\frac{x^2}{2} + \frac{y}{3} = 1</math> represents ellipse.</li> <li><math>\frac{x^2}{2} + \frac{y^2}{3} = 1</math> represents a circle.</li> </ol> </li> <li>The focus of a parabolic mirror as shown is at a distance of 5 cm from its vertex. If the mirror is 45 cm deep, find its diameter.</li> </ol>
<p>The students are expected to be familiar with 2-dimensions and straight line from their previous course.</p> <p>The students should be able to explain slope and various formulae for finding slope and the inclination of a line. They are expected to make use of these formulae to find the slopes and angle between two lines.</p> <p>The student understands the equation of a line in various forms. Using these equations, they will be able to find the distance between parallel lines and the length of perpendicular from a point on the line.</p>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>Find the slope of a line whose inclination is <math>135^\circ</math>.</li> <li>Find the inclination of a line whose slope is -1.</li> <li>Find the angle between two lines whose slopes are 1 and -1.</li> <li>Explain with one example each the equation of a straight line in different forms: equation of x-axis, equation of y-axis, line parallel to x-axis or parallel to y-axis, point slope form, two-point form, slope intercept form, intercept form, normal form and standard form.</li> <li>Find the distance between two parallel lines <math>4x - 3y + 5 = 0</math> and <math>4x - 3y + 7 = 0</math>.</li> </ol>

<p>The students are expected to recall their knowledge on coordinate geometry from the previous class.</p> <p>The learner will be able to understand the Cartesian Plane and the Cartesian coordinate system and the coordinate axes. They are expected to understand the XY plane, YZ plane, and ZX plane and the coordinates of a point determined by (x,y,z).</p> <p>The students are expected to apply their knowledge on distance formula, section formula and centroid of a triangle formula in 2-dimensional geometry to understand the formula in 3-dimensional geometry.</p>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ol style="list-style-type: none"> <li>1. Explain octant in 3-dimensional geometry.</li> <li>2. Show that the points (-2,3,5), (1,2,3) and (7,0,-1) are collinear.</li> <li>3. Using section formula, explain the mid-point formula and centroid of a triangle.</li> <li>4. Find the coordinate of the point where the line joining (3,4,1) and (5,1,6) crosses the xy-plane.</li> </ol>
<p>The students are expected to recall their previous knowledge on trigonometry and functions.</p> <p>The students should know the basic concept of limit, the working rule of limits, the fundamental theorem and some more important theorem of limits and they are expected to solve problems based on these theorems.</p> <p>The learners are expected to be familiar with the trigonometric transformations and simplifications and they are expected to apply this knowledge to understand the trigonometric limits and solve various problems.</p> <p>The learner will be able to understand the inequalities, left hand limit and right hand limit and then, limit of a function</p>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 22</u></p> <ol style="list-style-type: none"> <li>1. Explain the concept of limit by giving two examples.</li> <li>2. Evaluate: <ol style="list-style-type: none"> <li>(i) <math>\lim_{x \rightarrow 1} \frac{x^3 - 1}{x - 1}</math></li> <li>(ii) <math>\lim_{x \rightarrow 0} \frac{e^{4x} - 1}{x}</math></li> </ol> </li> <li>3. Evaluate : <ol style="list-style-type: none"> <li>(i) <math>\lim_{x \rightarrow 1} \frac{\sin 5x}{\sin 8x}</math></li> <li>(ii) <math>\lim_{x \rightarrow \pi/2} \frac{\tan 2x}{x - \pi/2}</math></li> <li>(iii) <math>\lim_{x \rightarrow a} \frac{\cos x - \cos a}{\cot x - \cot a}</math></li> </ol> </li> <li>4. Let <math>f(x) = \begin{cases} \cos x, &amp; x \geq 0 \\ x + k, &amp; x &lt; 0 \end{cases}</math> Find the value of <math>k</math> for which <math>\lim_{x \rightarrow 0} f(x)</math> exists.</li> </ol>



Introduce the meaning of differentiation geometrically and tell them its mathematical importance in different parts of subjects like Physics and Chemistry.

The learners aware of some basic rules to solve differentiation and use this to solve problem ranging from easy level to tougher problems using different set of rules.

Senior Secondary School – Mathematics – For Class XI – RS Aggarwal

1. Find  $\frac{dy}{dx}$  from first principle, where  $y = \sin x$  .

2. Write the formula of each of the following :

(i)  $\frac{dx^n}{dx}$

(ii)  $\frac{de^x}{dx}$

(iii)  $\frac{d \sin x}{dx}$

(iv)  $\frac{d \cos x}{dx}$

(v)  $\frac{d \tan x}{dx}$

(vi)  $\frac{d \cot x}{dx}$

(vii)  $\frac{d \sec x}{dx}$

(viii)  $\frac{d \operatorname{cosec} x}{dx}$

3. Differentiate :

(i)  $\frac{1}{\sqrt[3]{x}}$

(ii)  $6x^5 + 4x^3 - 3x^2 + 2x - 7$

4. If  $y = \frac{2 - 3 \cos x}{\sin x}$ , find  $\frac{dy}{dx}$  at

$x = \frac{\pi}{4}$

5. Differentiate :

(i)  $\frac{\log x}{x}$

(ii)  $\frac{e^x \sin x}{\sec x}$

6. If  $y = \frac{\cos x - \sin x}{\cos x + \sin x}$ , show that

$\frac{dy}{dx} + y^2 + 1 = 0$

<p>The students are expected to understand the concept of probability and set theory, permutation and combination from their previous class.</p> <p>The learners should understand the experiment, random experiment, sample space (set representation including one coin, two coins, three coins, a die, two dice, playing cards etc.), events and various types of events, occurrence of an event, algebra of events and then, with the help of this knowledge, they are expected to understand the probability of an event and a complementary event.</p> <p>The learners should know the odds of events and understand how they apply the odds in reality.</p> <p>The student should understand the probability of events with the special word- union, intersection, or, and, at least, at most, none of them etc. and they should know the use of all the special terms and all the important results in the different problems</p>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 24</u></p> <ol style="list-style-type: none"> <li>1. Explain the term probability by giving some examples from the previous course you have studied.</li> <li>2. Explain random experiment and sample space with one coin, two coins, three coins, a die, two dice.</li> <li>3. Explain with examples the terms: sure event, impossible event, equally likely events and the range of probability.</li> <li>4. Three unbiased coins are tossed, find the probability of getting exactly one head.</li> <li>5. If the odds against the occurrence of an event be 4:7, find the probability of occurrence of the event.</li> <li>6. A card is drawn from a deck of 52 cards, find the probability of getting a king or a heart or a red card.</li> </ol>
<p>Students knowledge are bridged from the idea of their previous knowledge about Statistics, what they learnt during their high school days.</p> <p>Introducing a new set of rules to tackle a more complicated problems involving related problems</p>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 25</u></p> <ol style="list-style-type: none"> <li>1. Define Mean, Median and Mode from your previous knowledge.</li> <li>2. Write the formula for finding Mean deviations for ungrouped data. Use this to find the mean deviations about the mean for the following data : 15,17,10,13,7,18,9,6,14,11.</li> <li>3. (a) Define Variance. (b) Find the Mean , Standard Deviation and Variance of First 10 multiples of 3</li> </ol>

<u>WEEK – 26</u>		
<p>Students are made aware of the application of logarithm in Chemistry and Physics.</p> <p>The learners will be able to understand the rule to tackle problems relating logarithm and antilogarithm to solve problems involving this.</p>	<p>Senior Secondary School – Mathematics – For Class XI – RS Aggarwal</p>	<ol style="list-style-type: none"> <li>1. Write down the laws of logarithm from your textbook.</li> <li>2. What do you mean by characteristic and mantissa of a logarithm. Write down the characteristic of each of the following :               <ol style="list-style-type: none"> <li>(i) 4385</li> <li>(ii) 43.85</li> <li>(iii) 0.4385</li> <li>(iv) 0.04385</li> </ol> </li> <li>3. Find the value of <math>\log 0.0954</math></li> <li>4. Find the value of <i>anti</i> log 1.204</li> </ol>

**Subject: MATHEMATICS CLASS – XII**

Expected Level of Competency/Learning Outcomes	Source/Resource	Week-wise suggested activities (to be guided by teacher)
<p>Students are motivated by letting them visualizing the nature of a function, whether they are increasing or decreasing.</p> <p>Using the above knowledge the learner will be able to differentiate their nature in some given intervals.</p> <p>The learner will be able to solve problem based on the intervals on which they are increasing or decreasing</p> <p>Based on the previous knowledge, students understand tangents and normals and solve the related problems.</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ol style="list-style-type: none"> <li>When do you say a function <math>f(x)</math> is said to be increasing, strictly increasing, decreasing and strictly decreasing on <math>(a,b)</math>.</li> <li>Discuss whether the function <math>f(x)=e^x</math> is strictly increasing or decreasing on <math>\mathbb{R}</math> (real number)</li> <li><math>f(x) = \frac{1}{x}</math> on <math>[1,10]</math> is increasing. True or False. Justify.</li> <li>Find the intervals on which the function <math>f(x) = 2x^3 - 3x^2 - 36x + 7</math> is             <ol style="list-style-type: none"> <li>Strictly increasing</li> <li>Strictly decreasing</li> </ol> </li> <li>Write the equation for tangent and normal to a curve <math>y = f(x)</math> at point <math>P(x_1, y_1)</math></li> <li>Find the equations of the tangent and normal to the curve <math>x = a \sin 3t, y = a \cos 2t</math> at <math>t = \frac{\pi}{4}</math>.</li> </ol>
<p>Using the previous knowledge, the learner will be able to bridge the meaning of integration using differentiation.</p> <p>The learner will be able to understand rules of differentiation and used them to solve problems related to this.</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>Discuss the nature of <math>C</math> (constant of integration) in integration. Illustrate with two examples.</li> <li>Evaluate :             <ol style="list-style-type: none"> <li><math>\int x^{\frac{5}{3}} dx</math></li> <li><math>\int \frac{1}{\sqrt[4]{x^3}} dx</math></li> <li><math>\int \cos 4x \cos x dx</math></li> </ol> </li> <li>Evaluate :             <ol style="list-style-type: none"> <li><math>\int \frac{e^{\tan^{-1} x}}{(1+x^2)} dx</math></li> <li><math>\int \frac{\cos 2x}{(\sin x + \cos x)^2} dx</math></li> </ol> </li> </ol>

<p>Using the previous knowledge the learner explains integration by parts.</p> <p>The learners are made aware of the first and second function in integration by parts. And will be able to solve the related problems.</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>1. Write the formula for <math>\int (uv)dx</math>, taking <math>u</math> as first function and <math>v</math> as second function.</p> <p>2. Evaluate :</p> <p>(i) <math>\int x \cos^2 x dx</math></p> <p>(ii) <math>\int e^x \left( \frac{1}{x} - \frac{1}{x^2} \right) dx</math></p> <p>(iii) <math>\int e^{2x} \sin x \cos x dx</math></p> <p>(iv) <math>\int e^{2x} \left( \frac{1 + \sin x}{1 + \cos x} \right) dx</math></p>
<p>The learners aware a new set of rules and various properties of integration.</p> <p>Using these, students are motivated to solve different kinds of problems from easy level to problems that need more steps to solve.</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>1. Write out the formula for each of the following :</p> <p>(i) <math>\int \frac{dx}{a^2 - x^2}</math></p> <p>(ii) <math>\int \frac{dx}{x^2 - a^2}</math></p> <p>(iii) <math>\int \frac{dx}{x^2 + a^2}</math></p> <p>(iv) <math>\int \frac{dx}{\sqrt{a^2 - x^2}}</math></p> <p>(v) <math>\int \frac{dx}{\sqrt{x^2 - a^2}}</math></p> <p>(vi) <math>\int \frac{dx}{\sqrt{x^2 + a^2}}</math></p> <p>2. Evaluate :</p> <p>(i) <math>\int \frac{dx}{4\sin^2 x + 5\cos^2 x}</math></p> <p>(ii) <math>\int \frac{x^2 + 1}{x^4 + 1} dx</math></p> <p>(iii) <math>\int \frac{dx}{\sqrt{x^2 - 3x + 2}}</math></p> <p>(iv) <math>\int \frac{5x + 3}{\sqrt{x^2 + 4x + 10}} dx</math></p>

<p>The learners will be able to understand integration geometrically and calculate the sum of the region bounded by curves/lines etc.</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>Students are given task to solve problems based on their previous knowledge and introduce a new type that need new set of rules.</p> <p>1. Evaluate :</p> <p>(i) <math>\int \frac{x^2 + x + 1}{(x + 2)(x + 1)^2} dx</math></p> <p>(ii) <math>\int_0^{\frac{\pi}{4}} \sin 2x \cos 3x dx</math></p> <p>2. Using integration, find the area of the region bounded by the line <math>2y = 5x + 7</math>, the x-axis and the lines <math>x = 2</math> and <math>x = 8</math></p> <p>3. Verify <math>y = e^x(A \cos x + B \sin x)</math> is the general solution of the differential equation <math>\frac{d^2 y}{dx^2} - 2 \frac{dy}{dx} + 2y = 0</math></p> <p>4. Solve the differential equation <math>\frac{dy}{dx} = \frac{2xy}{(x^2 - y^2)}</math>.</p>
<p>Based on the students previous knowledge of vectors and scalars, product of vectors.</p> <p>The learners are expected to understand the different types/laws/properties of vectors.</p> <p>The students are expected to apply the vector properties to find the angle between vectors, area of triangle, a quadrilateral and a parallelogram.</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 22</u></p> <p>1. Differentiate between vector and scalar.</p> <p>2. Find a unit vector in the direction of the vector <math>\hat{i} + \hat{j} + \hat{k}</math>.</p> <p>3. Using vector method, show that the points <math>(1, -1, 0)</math>, <math>(4, -3, 1)</math> and <math>(2, -4, 5)</math> are the vertices of a right-angled triangle.</p> <p>4. Find <math>\hat{a} \cdot \hat{b}</math> and <math> \hat{a} \cdot \hat{b} </math> when <math>\hat{a} = \hat{i} + \hat{j}</math> and <math>\hat{b} = \hat{i} - \hat{j}</math>.</p> <p>5. How do you calculate the angle between two vectors by using dot/cross product? Give example.</p> <p>6. <math> f \hat{a}  = 2</math>, <math> \hat{b}  = 5</math> and <math> \hat{a} \times \hat{b}  = 8</math>, find <math>\hat{a} \cdot \hat{b}</math>.</p>

<p>The students are expected to recall their previous knowledge of 3D and explain with examples.</p> <p>The students are expected to understand the direction ratios and direction cosines of a line.</p> <p>The learners are expected to understand the various equations of the line in vector form and scalar form and make use of it to show that the lines intersect, to find the foot of the perpendicular from the point to line and their distance.</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 23</u></p> <ol style="list-style-type: none"> <li>Find the dr's and dc's of the line segment joining (1,0,0) and (0,1,1).</li> <li>Explain the equation of a line passing through a given point and parallel to a given vector by giving example.</li> <li>Explain the equation of a line passing through two points and give example.</li> <li>Find the image of the point (5,9,3) in the line <math>\frac{x-1}{2} = \frac{y-2}{3} = \frac{z-3}{4}</math>.</li> <li>Explain how to show that two lines intersect each other and find their point of intersection by giving example.</li> <li>Explain coplanar lines and skew lines. Explain and give example to find the shortest distance between two lines.</li> </ol>
<p>The students are expected to understand plane and its equation by making use of different methods/forms.</p> <p>The students are expected to explain that joining three points always form a plane, but there must be a condition for four points to be collinear</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 24</u></p> <ol style="list-style-type: none"> <li>Show that (3,2,-5), (-1,4,-3), (-3,8,-5) and (-3,2,1) are coplanar.</li> <li>Reduce the equation of the plane <math>4x - 3y + 2z = 12</math> into intercept form.</li> <li>Explain equation of a plane in normal form and find a unit vector normal to the plane <math>x - 2y + 2z = 6</math>.</li> <li>Find the equation of a plane passing through (4,6,2) and the point of intersection of the line <math>\frac{x-1}{3} = \frac{y}{2} = \frac{z+1}{7}</math> and the plane <math>x + y - z = 8</math></li> <li>Find the image of the point (3,2,1) to the plane <math>2x - y + z + 1 = 0</math>.</li> </ol>
<p>The students are expected to recall probability from the previous course.</p> <p>The learners are expected to understand conditional probability, multiplication theorem on probability and multiplication rule, theorem on total probability and Bayes's Theorem.</p> <p>The learners are expected to be able to differentiate between simple probability, multiplication rule, Bayes's</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 25</u></p> <ol style="list-style-type: none"> <li>Explain conditional probability.</li> <li>A coin is tossed and then a die is thrown. Find the probability of obtaining a 6, given that a head came up.</li> <li>A problem is given to three students whose chances of solving it are <math>\frac{3}{4}</math>, <math>\frac{2}{3}</math> and <math>\frac{5}{6}</math>. What is the probability that the problem is solved by exactly two students?</li> <li>A man is known to speak the truth 3 out of 4 times. He throws a die and reports that it is a 6. Find the probability that it is actually a 6.</li> </ol>

<p>Theorem etc. and are expected to understand how the events are taken and how to differentiate independent events and dependent events.</p> <p>The students are expected to understand random variable and probability distribution.</p>		<p>5. Find the probability distribution of number of tails in 4 tosses of a coin.</p>
<p>The students are expected to be familiar with two-variable linear inequalities, graphs of linear inequalities and giving a shaded solution region for the system of linear inequalities.</p> <p>The students are expected to understand the constraints, how to form these constraints, objective function, optimal value of objective function, feasible solution, optimal solution and the optimization technique.</p> <p>The students are expected to understand table or make use of table for finding the system of linear inequalities.</p>	<p>Senior Secondary School – Mathematics – for class XII – RS Aggarwal</p>	<p style="text-align: center;"><u>WEEK – 26</u></p> <ol style="list-style-type: none"> <li>1. Solve <math>x \geq 0, y \leq 4, 2x + 3y \leq 18</math>.</li> <li>2. Maximize <math>Z = 3x + 4y</math> subject to the constraints : <math>x + y \leq 4, x \geq 0, y \geq 0</math>.</li> <li>3. Minimize <math>Z = -3x + 4y</math> subject to <math>x + 2y \leq 8, 3x + 2y \leq 12, x \geq 0, y \geq 0</math>.</li> <li>4. A manufacturing company makes two types of television sets; one is black and white and the other is coloured. The company has resources to make at most 300 sets a week. It takes Rs 1800 to make a black and white set and Rs 2700 to make a coloured set. The company cannot spend more than Rs 648000 a week to make television sets. If it makes a profit of Rs 510 per black and white set and Rs 675 per coloured set, how many sets of each type should be produced so that the company has a maximum profit? Formulate this problem as a LPP given that the objective is to maximize the profit.</li> </ol>



**Subject: PHYSICS CLASS – XI**

<p><b>Expected Level of Competency/Learning Outcomes</b></p>	<p><b>Source/Resource</b></p>	<p><b>Week-wise suggested activities (to be guided by Teachers)</b></p>
<p>The learner will be able to understand the concept of temperature, thermal expansion and the principle of calorimeter. They will be able to differentiate between specific heat and latent heat.</p>	<p>Class XI Physics Textbook Part II NCERT Publication.</p> <p>Modern's ABC of Physics, Modern Publishers.</p> <p>Internet. You Tube channels.</p>	<p style="text-align: center;"><u>WEEK – 17 (UNIT VII)</u></p> <p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Definition of heat and temperature and their different units.</li> <li>2. Meaning of thermal expansion, thermal expansion in solids (linear, superficial and volumetric) and liquids.</li> <li>3. Anomalous behavior of water.</li> <li>4. Definition of specific heat, <math>C_v</math> and <math>C_p</math> and their relation.</li> <li>5. Meaning and principle of calorimeter.</li> <li>6. Definition of latent heat, latent heat of fusion and latent heat of vaporization.</li> </ol> <p><u>Practice numerical problems:</u></p> <ol style="list-style-type: none"> <li>1. Why <math>C_p</math> is greater than <math>C_v</math> ?</li> <li>2. Which will be greater? Latent heat of fusion of water or latent heat of vaporization of water.</li> </ol>
<p>The learner will be able to understand the concept of the three modes of heat transmission and their practical applications in daily life. The learner will be able to understand the radiations emitted by a black body and the cause of Green House Effect.</p>	<p>Class XI Physics Textbook Part II NCERT Publication.</p> <p>Modern's ABC of Physics, Modern Publishers.</p> <p>Internet. You Tube channels.</p>	<p style="text-align: center;"><u>WEEK – 18 (UNIT VII)</u></p> <p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Meaning and explanation of the three modes of transmission of heat.</li> <li>2. Definition of thermal conductivity and coefficient of thermal conductivity.</li> <li>3. Expression for the coefficient of thermal conductivity.</li> <li>4. Definition and meaning of black body and black body radiation.</li> <li>5. Statement of Stefan's law and Wien's displacement law.</li> <li>6. Meaning of Green House Effect.</li> </ol> <p><u>Practice numerical problem:</u></p> <ol style="list-style-type: none"> <li>1. One end of a 0.25 m long metal bar is in steam and the other end is in contact with ice. If <math>15 \times 10^{-3}</math> kg of ice melts per minute, what is the thermal conductivity of the metal? Given: Cross section of the bar is <math>7 \times 10^{-4} \text{m}^2</math> and latent heat of ice is 80 calorie per kg</li> </ol>

<p>The learner will be able to explain the concept of temperature. They will be able to explain Zeroth law and first law of thermodynamics.</p> <p>The learner will be able to differentiate between isothermal and adiabatic processes. They will be able to explain the three laws of thermodynamics.</p>	<p>Class XI Physics Textbook Part II NCERT Publication.</p> <p>Modern's ABC of Physics, Modern Publishers.</p> <p>Internet. You Tube channels</p>	<p style="text-align: center;"><u>WEEK – 19 (UNIT VIII)</u></p> <p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Meaning of thermal equilibrium.</li> <li>2. Statement of Zeroth law of thermodynamics and the concept of temperature.</li> <li>3. Meaning and explanation of internal energy of a thermo dynamical system with its mathematical expression.</li> <li>4. Statement and explanation of first law of thermodynamics with its mathematical expression.</li> <li>5. Explanation of isothermal and adiabatic processes with examples.</li> <li>6. Clausius statement and Kelvin-Plank statement of second law of thermodynamics.</li> <li>7. Explanation of reversible and irreversible processes with examples.</li> </ol> <p><u>Practice numerical problems:</u></p> <ol style="list-style-type: none"> <li>1. Calculate the rms velocity of oxygen molecule at 27<sup>0</sup> C, atomic weight of oxygen is 16.</li> <li>2. Find the kinetic energy of 1g of hydrogen gas at 77<sup>0</sup>C. Given R=8.31 J mole<sup>-1</sup>K<sup>-1</sup>.</li> </ol>
<p>The learner will be able to derive the pressure exerted by gas based on the assumptions of kinetic theory of gases.</p> <p>With the knowledge of equipartition of energy, the learner will be able to find the ratio of C<sub>p</sub> to C<sub>v</sub> for different type of gases.</p> <p>The learner will be able to understand the concept of mean free path and Avogadro's number.</p>	<p>Class XI Physics Textbook Part II NCERT Publication.</p> <p>Modern's ABC of Physics, Modern Publishers.</p> <p>Internet. You Tube channels</p>	<p style="text-align: center;"><u>WEEK – 20 (UNIT IX)</u></p> <p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Statement of Boyle's law and Charles's law with their mathematical expression.</li> <li>2. Derivation of expression for perfect gas law (equation of state of a perfect gas).</li> <li>3. Statement and assumptions of kinetic theory of gases.</li> <li>4. Derivation of expression for Pressure exerted by a gas inside a container.</li> <li>5. Explanation of Kinetic Interpretation of Temperature (Relation between pressure and kinetic energy).</li> <li>6. Meaning of root mean square velocity of gas molecules with its mathematical expression. Definition of degrees of freedom. Mathematical methods of finding degrees of freedom of gases.</li> <li>7. Statement of law of equipartition of energy.</li> <li>8. Ratio of specific heats of a gas (Application of law of equipartition of energy).</li> <li>9. Concept of mean free path and Avogadro's number.</li> </ol>

<p>The learner will be able to understand the conservative and non conservative forces; they will be able to understand the conversion of energy from one form to another.</p>	<p>Class XI Physics Textbook Part I NCERT Publication. Modern's ABC of Physics, Modern Publishers. Internet. You Tube channels.</p>	<p style="text-align: center;"><u>WEEK – 21 (UNIT-IV)</u></p> <p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Meaning of conservative and non conservative forces.</li> <li>2. Mathematical proof of conservation of mechanical energy (kinetic and potential energies).</li> <li>3. Definition of angular displacement, angular velocity and angular acceleration in circular motion.</li> <li>4. Derivation of the minimum speed of a body in vertical motion at its highest and lowest point.</li> <li>5. Difference between elastic and inelastic collisions.</li> <li>6. Mathematical explanation of elastic and inelastic collisions in one and two dimensions.</li> </ol>
<p>The learner will be able to understand the concept of centre of mass of rigid body, conservation of momentum and torque.</p> <p>The learner will be able to compare the equations of motions for linear and rotational motion. They will be able to understand the concept of moment of inertia for simple geometrical objects.</p>	<p>Class XI Physics Textbook Part I NCERT Publication. Modern's ABC of Physics, Modern Publishers. Internet. You Tube channels..</p>	<p style="text-align: center;"><u>WEEK – 22 (UNIT-V)</u></p> <p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Centre of mass of a two-particle system.</li> <li>2. Momentum conservation and centre of mass motion.</li> <li>3. Centre of mass of a rigid body; centre of mass of uniform rod.</li> <li>4. Moment of a force, torque, angular momentum, conservation of angular momentum with some examples.</li> <li>5. Equilibrium of rigid bodies.</li> <li>6. Rigid body rotation and equation of rotational motion.</li> <li>7. Comparison of linear and rotational motions.</li> <li>8. Moment of inertia, radius of gyration.</li> <li>9. Values of M.I. for simple geometrical objects (no derivation).</li> </ol>

<u>WEEK – 23 (UNIT-X)</u>		
<p>The learner will be able to understand the concept of periodic motions and terms involve in periodic motions (frequency, time period, phase, and wavelength). The learner will be able to explain the meaning of simple harmonic motion and derive its equation. They will be able to explain the motion of simple pendulum is SHM and derive the expression for its time period. The learner will be able to understand the meaning longitudinal and transverse motions of wave motions. They will be able to understand the meaning of superposition principle, progressive wave, standing waves in strings and organ pipes.</p>	<p>Class XI Physics Textbook Part II NCERT Publication. Modern's ABC of Physics, Modern Publishers. Internet. You Tube channels.</p>	<p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Periodic motion: period, frequency.</li> <li>2. Displacement as a function of time. Periodic functions.</li> <li>3. Simple harmonic motion (SHM) and its equation.</li> <li>4. Phase and oscillations of a spring - restoring force and force constant.</li> <li>5. Energy in SHM — kinetic and potential energies.</li> <li>6. Simple pendulum - derivation of expression for its time period.</li> <li>7. Free, forced and damped oscillations (qualitative ideas only), resonance.</li> <li>8. Wave motion: Longitudinal and transverse waves</li> <li>9. Speed of wave motion.</li> <li>10. Displacement relation for a progressive wave.</li> <li>11. Principle of superposition of waves.</li> <li>12. Reflection of waves, standing waves in strings and organ pipes, beats.</li> </ol>

Subject: PHYSICS CLASS – XII

Expected Level of Competency/Learning Outcomes	Source/Resource	Week-wise suggested activities (to be guided by teachers)
<p>The learner will be able to understand the concept of mass defect, nuclear energy and the energy released in both nuclear reactions (Fission and Fusion). Also the learner will be able to understand the concept of electromagnetic induction and Eddy current and their practical applications.</p>	<p>Class XII Physics Textbook Part II NCERT Publication. Modern’s ABC of Physics, Modern Publishers. Internet. You Tube channels</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Explanation of mass energy equivalence and atomic mass unit.</li> <li>2. Definition of mass defect and its mathematical expression.</li> <li>3. Definition and explanation of nuclear fission reactions and nuclear fusion reactions.</li> <li>4. Definition of: (a) electromagnetic induction (b) induced emf and induced current, (c) Lenz’s law.</li> <li>5. Definition of magnetic flux, its mathematical expression and SI unit.</li> <li>6. Explanation of Faraday’s law of electromagnetic induction with its mathematical expression (Faraday-Lenz’s law).</li> <li>7. Definition and meaning of Eddy current and its applications.</li> <li>8. Definition and expression of self inductance and mutual inductance with their mathematical expressions. Definition of one Henry based on their expressions.</li> </ol> <p><u>Practice numerical problems:</u></p> <ol style="list-style-type: none"> <li>1. Write down the nuclear reaction, when neutrons bombard <math>{}_{16}\text{S}^{32}</math> nuclei, radioactive phosphorous <math>{}_{15}\text{P}^{32}</math> is produced.</li> <li>2. Complete the nuclear reactions <math>{}_{3}\text{Li}^6 + {}_{1}\text{n}^0 \dots\dots\dots</math></li> </ol> <p><u>Hots:</u> 1. Why is the energy released much greater in nuclear fusion reaction as compared to nuclear fission reaction. 2. Why does the self inductance of a straight conductor is zero? <i>*To solve at least another 5 numerical problems and nuclear reactions on the above mentioned topics</i></p>

<u>WEEK – 18</u>		
<p>The learner will be able to explain the working of transformer in electric energy distribution.</p> <p>The learner will be able to apply the concept of LC oscillations to construct an oscillator (inverter).</p> <p>They will be able to get the idea that household electrical devices work on rms value of alternating current and voltage.</p>	<p>Class XII Physics Textbook Part II</p> <p>NCERT Publication.</p> <p>Modern's ABC of Physics, Modern Publishers.</p> <p>Internet.</p> <p>YouTube channels</p>	<p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Definition of alternating current and alternating emf.</li> <li>2. Definition of virtual or rms value of alternating current/voltage and its mathematical relation with peak value.</li> <li>3. Definition of reactance and impedance.</li> <li>4. Expression for impedance of series LCR circuit.</li> <li>5. Meaning of series resonant circuit and conditions that take place in resonant circuit.</li> <li>6. Expression for instantaneous power of an ac circuit.</li> <li>7. Explanation of LC oscillations (qualitative idea).</li> <li>8. Principle, construction and working of ac generator, derivation of the expression for the induced emf.</li> <li>9. Principle, construction and working of a transformer and the energy losses in it.</li> </ol> <p><u>Practice numerical problems:</u></p> <ol style="list-style-type: none"> <li>1. A magnetic field of flux density 50T acts normal to a 50 turn coil of <math>100\text{cm}^2</math> area. Find the emf induced in it if this coil is removed from the field in 0.1second.</li> <li>2. The instantaneous current from an alternating current source is <math>I = 5\text{Sin}314t</math>. What is the rms value of the current?</li> <li>3. How much current is drawn by the primary coil of a transformer connected to 220V supply, when it delivers power to an 110V-550W refrigerator?</li> <li>4. The electric mains in a house is marked 220V - 50Hz. Write down the equation for instantaneous voltage.</li> </ol>

<u>WEEK – 19</u>		
<p>The learner will be able to distinguish the different types of matter on the basis of their conductivity. Also the learner will be able to understand the different uses of junction diode.</p>	<p>Class XII Physics Textbook Part II</p> <p>NCERT Publication.</p> <p>Modern's ABC of Physics, Modern Publishers.</p> <p>Internet. You Tube channels</p>	<p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Energy bands in solids</li> <li>2. Distinction between conductors, insulators and semiconductors on the basis of energy bands</li> <li>3. Formation of p-n junction diode</li> <li>4. I-V characteristics of p-n junction diode in forward and reverse bias</li> <li>5. Explanation of the working of Diode as a rectifier(half wave and full wave)</li> <li>6. Special purpose p-n junction diodes: LED, Photo diode, Solar cell.</li> </ol> <p><u>Practice numerical problems:</u></p> <p>1. A P-type semiconductor has acceptor level <math>1.57\text{eV}</math> above the valence band. What is the maximum wavelength of light required to create a hole? Given that <math>1\text{eV}=1.6\times 10^{-19}\text{J}</math> and <math>h=6.62\times 10^{-34}\text{Js}</math>.</p> <p>2. A semiconductor has equal electron and hole concentration of <math>6\times 10^8\text{ m}^{-3}</math>. On doping with a certain impurity, electron concentration increases to <math>8\times 10^{12}\text{ m}^{-3}</math>.</p> <ol style="list-style-type: none"> <li>i) Identify the new semiconductor obtained after doping.</li> <li>ii) Calculate the hole concentration</li> <li>iii) How does the energy gap vary with doping?</li> </ol> <p>3. A semiconductor has electron concentration of <math>0.45\times 10^{20}\text{ m}^{-3}</math> and the hole concentration of <math>5\times 10^{20}\text{ m}^{-3}</math>. Find its conductivity. Given:- electron mobility=<math>0.135\text{m}^2\text{V}^{-1}\text{s}^{-1}</math>, hole mobility=<math>0.048\text{m}^2\text{V}^{-1}\text{s}^{-1}</math>.</p>

<u>WEEK – 20</u>		
<p>The learner will be able to understand the different parts of electromagnetic spectrum and their uses in daily life.</p>	<p>Class XII Physics Textbook Part II NCERT Publication.</p> <p>Modern's ABC of Physics, Modern Publishers.</p> <p>Internet. You Tube channels</p>	<p><u>To understand the following topics on their own:</u></p> <ol style="list-style-type: none"> <li>1. Definition of Electromagnetic waves and their characteristics.</li> <li>2. Transverse nature of the electromagnetic waves(qualitative ideas only)</li> <li>3. Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, x-rays, gamma –rays) including elementary facts about their uses</li> </ol> <p><u>Practice numerical problems:</u></p> <ol style="list-style-type: none"> <li>1. The oscillating electric field in a plane electromagnetic wave is given by <math>E_x = 50 \sin(\omega t - kx)</math> in <math>\text{Vm}^{-1}</math>. The frequency of electric field is <math>2 \times 10^7 \text{ Hz}</math>.             <ol style="list-style-type: none"> <li>(a) find <math>\omega</math>, <math>\lambda</math> and <math>k</math> and write the expression for electric field.</li> <li>(b) find <math>B_0</math> and write expression for magnetic field.</li> <li>(c) Predict the direction of propagation of electromagnetic wave.</li> </ol> </li> </ol>



**Subject : CHEMISTRY CLASS – XI**

<b>Expected Level of Competency / Learning Outcomes</b>	<b>Sources / Resources</b>	<b>Week-wise suggestive activities (to be guided by Teachers)</b>
<p>The learner will</p> <ul style="list-style-type: none"> <li>- be able to write Lewis structures of simple molecules</li> <li>- be acquainted with VSEPR theory and able to predict geometry and hybridisation of simple molecules</li> <li>- be able to recall the lessons learnt and will have deeper understanding and applications</li> </ul>	<p style="text-align: center;">UNIT - IV</p> <p style="text-align: center;">Chemical bonding and molecular structure</p> <p style="text-align: center;">Class 11 Modern ABC of Chemistry by Dr SP Jauhar</p> <p style="text-align: center;">Class 11 Chemistry NCERT Textbook</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>The learner will use textbook as well as online resources to gain knowledge for better understanding of the topic. Writing of Lewis structures of simple molecules, predicting of geometry and hybridisation of molecules should be practised thoroughly. Assignments may be given by teachers to test the knowledge and understanding of the students.</p>
<p>The learners will be able to:</p> <ul style="list-style-type: none"> <li>- recall the lesson learnt and will also have deeper understanding on interconversion of energy</li> <li>- understand the laws of thermodynamics and the related numerical problems</li> <li>- understand the driving forces of interconversion of energy</li> </ul>	<p style="text-align: center;">UNIT VI</p> <p style="text-align: center;">Thermodynamics</p> <p style="text-align: center;">Class 11 Modern ABC of Chemistry by Dr SP Jauhar</p> <p style="text-align: center;">Class 11 Chemistry NCERT Textbook</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>The learner will go through numerical examples and question related to</p> <ul style="list-style-type: none"> <li>- the laws of thermodynamics.</li> <li>- Hess's law</li> <li>- relationship between <math>\Delta H</math> and <math>\Delta U</math></li> <li>- Born-Haber cycle</li> <li>-Gibbs energy change</li> </ul>
<p>The learner will:</p> <ul style="list-style-type: none"> <li>- be able to predict the direction of reaction through the given chemical equation.</li> <li>- gain basic knowledge in ionisation of acid and bases</li> <li>- achieve higher ability in solving numerical problems</li> <li>- be able to apply their basic knowledge in balancing any type of redox reaction</li> </ul>	<p style="text-align: center;">UNIT – VII &amp; VIII</p> <p style="text-align: center;">Equilibrium</p> <p style="text-align: center;">Redox Reactions</p> <p style="text-align: center;">Class 11 Modern ABC of Chemistry by Dr. SP Jauhar</p> <p style="text-align: center;">Class 11 Chemistry NCERT Textbook</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>The students with the guidance of the teachers/lecturers are advised to read the topics from the textbook or other available sources and make notes for the same:</p> <ol style="list-style-type: none"> <li>i. Le-Chatelier’s principle and its application in reaction equilibrium</li> <li>ii. Calculations involving acid-base equilibria and ionization of acids and bases.</li> <li>iii. Ionisation constant of water, ionic product of water.</li> <li>iv. Calculations involving solubility product and buffer solution.</li> <li>v. Balancing of redox reaction using oxidation number method and half reaction method.</li> </ol>

<p>The learners will:</p> <ul style="list-style-type: none"> <li>- Have a better understanding of the chemistry of p-block elements</li> <li>- Be able to handle reasoning questions</li> </ul>	<p style="text-align: center;"><b>UNIT-XI</b></p> <p style="text-align: center;">Some p-Block elements</p> <p style="text-align: center;">Class 11 Modern ABC of Chemistry by Dr SP Jauhar</p> <p style="text-align: center;">Class 11 Chemistry NCERT Textbook</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>The learners will use text book and other sources to explore and explain - Relevant Practice problems and solved examples from these two group of p-Block elements given at the end of each topic. The students must go through the chapter summary given at the end of this particular unit. The students are also expected to go through conceptual questions and an even brain twisting questions given at the end of this particular unit. They are also told to go through MCQ questions at the end of each unit.</p> <p><b>THE STUDENTS MAY MAKE IMPORTANT NOTES FROM THESE SOURCES</b></p>
<p>The learner will</p> <ul style="list-style-type: none"> <li>- be able to recall the lessons and gain better understanding and applications of the topic</li> <li>- be able to name organic compound using IUPAC system</li> <li>- be able to identify the different types of reactions</li> </ul>	<p style="text-align: center;"><b>UNIT - XII</b></p> <p style="text-align: center;">Organic Chemistry- Some basic principles and techniques</p> <p style="text-align: center;"><b>UNIT - XIII</b></p> <p style="text-align: center;">Hydrocarbons</p> <p style="text-align: center;">Class 11 Modern ABC of Chemistry by Dr SP Jauhar</p> <p style="text-align: center;">Class 11 Chemistry NCERT textbook</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>The learner should read and study their textbook. Teachers are expected to give assignments and practice problems to the students to help and check their level of understanding. Recapitulation of topics and remedial classes will be performed</p>

**Subject : CHEMISTRY CLASS – XII**

Expected Level of Competency / Learning Outcomes	Sources / Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>The learners will be able to:</p> <ul style="list-style-type: none"> <li>- recall the lesson learnt and will also have deeper understanding on solid states, binding forces, packing efficiency, etc in solid state.</li> <li>- identify the types of solutions in our day to day life</li> <li>- understand the concentration of solutions and its effects</li> <li>- understand the change in properties of solutions (vapour pressure, melting points and boiling points) on the constituent of the solution</li> <li>- to solve numerical problems related to the constituents of solutions</li> </ul>	<p>UNIT I - II</p> <p>Solids</p> <p>Solutions</p> <p>Class 12 Modern ABC of Chemistry by Dr. SP Jauhar</p> <p>Class 12 Chemistry NCERT Textbook</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>Teachers are to prepare concept questions from unit I and II, and students are to tackle and give answers to these questions -</p> <p><u>Unit I:</u></p> <ul style="list-style-type: none"> <li>- no. of atoms per unit cell</li> <li>- calculations involving unit cell dimensions</li> <li>- imperfections in solids</li> </ul> <p><u>Unit – II:</u></p> <ul style="list-style-type: none"> <li>- units of concentration</li> <li>- Raoult’s law</li> <li>- Ideal and non-ideal solution</li> <li>- elevation in boiling point</li> <li>- depression in freezing point</li> <li>- osmotic pressure</li> </ul> <p>Recapitulation of topics learnt and remedial class will be performed during this week</p>
<p>The learners will be able to:</p> <ul style="list-style-type: none"> <li>- recall the lesson learnt and will also have deeper understanding on redox reaction and the uses of it</li> <li>- understand the conductivity and its factors</li> <li>- understand the dependence of electrolyte and concentration of electrolyte solution</li> <li>- solve numerical problems related with the type of electrode and concentration of electrolyte solutions</li> <li>- express the rate of reactions and the reason for the speed of the reaction</li> <li>- identify order of a reaction and molecularity</li> <li>- calculation of the speed, duration of the reaction and age of archaeological samples.</li> </ul>	<p>UNIT III – IV</p> <p>Electrochemistry</p> <p>Chemical Kinetics</p> <p>Class 12 Modern ABC of Chemistry by Dr. SP Jauhar</p> <p>Class 12 Chemistry NCERT Textbook</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Teachers are to prepare concept questions from Unit III - IV and the students are to tackle and give answers to these questions</p> <p><u>Unit III:</u></p> <ul style="list-style-type: none"> <li>-Kohlraush's law</li> <li>-Galvanic cell</li> <li>-Nernst equation</li> <li>-Equilibrium constant</li> <li>-Gibb’s free energy</li> </ul> <p><u>Unit IV:</u></p> <ul style="list-style-type: none"> <li>-Factors influencing rates of chemical reaction</li> <li>-Order of reaction</li> <li>-Molecularity of reaction</li> <li>-Numerical problems on integrated rate expression and half-life period</li> </ul> <p>Recapitulation of topics learnt and remedial class will be performed during this week</p>

<p>The learners will:</p> <ul style="list-style-type: none"> <li>- have a better understanding of the chemistry of p-block elements</li> <li>- be able to handle problems based on understanding</li> <li>- able to name the co-ordination compounds</li> <li>- be able to predict the geometry of co-ordination compounds</li> </ul>	<p style="text-align: center;">UNIT-VII</p> <p style="text-align: center;">p-BLOCK ELEMENTS</p> <p style="text-align: center;">UNIT-VIII</p> <p style="text-align: center;">d and f-BLOCK ELEMENTS</p> <p style="text-align: center;">UNIT-IX</p> <p style="text-align: center;">Co-Ordination Chemistry</p> <p style="text-align: center;">Class 12 Modern ABC of Chemistry by Dr. SP Jauhar</p> <p style="text-align: center;">Class 12 Chemistry NCERT Textbook</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>The learners will use text book and other sources to explore and explain - Practice problems and solved examples from p-Block elements and also d and f-Block elements given in each and every topic they have covered inside this particular unit.</p> <p>The students are expected to go through conceptual questions and attempt the brain twisting questions given at the end of these particular units.</p> <p>They are also told to go through MCQ questions at the end of each unit. The students have also to go through practice problems regarding naming and formulation of complexes and complex ions as given in the end of this particular topic.</p> <p>They are also ask to explain by word of the valence bond treatment for some complexes as given in table 7 of Unit 9. They are also expected to go through conceptual questions, NCERT Files,HOTS question and MCQ at the end of this unit.</p> <p style="text-align: center;"><b>THE STUDENTS MAY MAKE IMPORTANT NOTES FROM THESE SOURCES</b></p>
<p>The learner will:</p> <ul style="list-style-type: none"> <li>- be able to predict the strength and types of bonds present in organic compounds</li> <li>- understand the influence of bond order and electron cloud in cleaving or forming a bond in nucleophilic reaction</li> <li>- be able to predict and integrate the paths for organic reactions</li> <li>- be able to differentiate and compare the many possible paths for a reaction and draw conclusion</li> <li>- Understand the involvement of electron donating group in</li> </ul>	<p style="text-align: center;">UNIT – X</p> <p style="text-align: center;">Haloalkanes and Haloarenes</p> <p style="text-align: center;">UNIT – XI</p> <p style="text-align: center;">Alcohols, Phenols and Ethers</p> <p style="text-align: center;">Class 12 Modern ABC of Chemistry by Dr. SP Jauhar</p> <p style="text-align: center;">Class 12 Chemistry NCERT Textbook</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>The students with the guidance of the teachers/lecturers are advised to read the topics from the textbook or other sources and make notes for the same:</p> <ol style="list-style-type: none"> <li>i. melting and boiling points of haloalkanes, haloarenes, alcohols and phenols.</li> <li>ii. reactivity comparison of haloalkanes and haloarenes towards nucleophilic substitution reactions.</li> <li>iii. Reactions involving halogenations of benzene, hydration of alkenes and dehydration of alcohols with mechanism involved in it.</li> <li>iv. Reactions involving markovnikov rule &amp; Saytzeff's rule with their application in organic reactions.</li> <li>v. Ortho- and para- directing nature of halogens and OH-group when attached to benzene.</li> </ol>

<p>facilitating a reaction and comparison of compound behaviour.</p>		<p>vi. Acidity comparison of alcohols and phenols. vii. Make a list of electron withdrawing and electron donating groups.</p>
<p>The learner will be able to</p> <ul style="list-style-type: none"> <li>- recall the lessons learnt and have better understanding and applications of the topics</li> <li>- distinguish between organic compounds using chemical reactions</li> <li>- understand reactions for conversion of compounds</li> <li>- write important named reactions</li> <li>- write reaction mechanisms</li> <li>- tackle questions based on their physical and chemical properties</li> </ul>	<p style="text-align: center;">UNIT - XII</p> <p style="text-align: center;">Aldehydes, Ketones and Carboxylic acids</p> <p style="text-align: center;">UNIT - XIII</p> <p style="text-align: center;">Organic compounds containing Nitrogen</p> <p style="text-align: center;">Class 12 Modern ABC of Chemistry by Dr SP Jauhar</p> <p style="text-align: center;">Class 12 Chemistry NCERT textbook</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>The learner will use textbook and online resources. Besides the explanation of the topic in the textbook, MCQs, solved examples and conceptual questions given in each topic should also be covered.</p>

Subject : BIOLOGY CLASS – XI

Expected Level of Competency / Learning Outcomes	Sources / Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>The student will be able to</p> <ul style="list-style-type: none"> <li>-understand cyclic and non-cyclic photophosphorylation.</li> <li>-understand light reaction and Dark Reaction of photosynthesis.</li> <li>-compare C<sub>3</sub> and C<sub>4</sub> plants.</li> <li>-understand Photorespiration and factors influencing photorespiration</li> </ul> <p>-differentiate between cellular respiration and combustion.</p> <ul style="list-style-type: none"> <li>-understand how ATP release energy.</li> <li>-differentiate between aerobic and anaerobic respiration.</li> </ul>	<p>Textbook of Biology NCERT Textbook of Biology (SaritaAgarwal)</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p style="text-align: center;"><b>Chapter 13 Photosynthesis</b></p> <p>Read the chapter thoroughly and answer the following questions.</p> <p>Q1. Compare Non- Cyclic and Cyclic Photophosphorylation. Q2. What is Light Reaction? Q3. Explain Biosynthetic Phase or Dark Reaction in detail with the help of a schematic diagram. Q4. Compare C<sub>3</sub> and C<sub>4</sub> plants. Q5. What is Photorespiration? What are the useful role of Photorespiration? Q6. What are the factors influencing Photosynthesis?</p> <p style="text-align: center;"><b>Chapter 14 Respiration</b></p> <p>Q1. Write the differences between Cellular respiration and Combustion. Q2. How does ATP release energy? Q3. What are the differences between Aerobic Respiration and Anaerobic Respiration?</p>
<p>The learner will be able to</p> <ul style="list-style-type: none"> <li>-understand how glucose is broken down to release energy inside the cell.</li> <li>-differentiate the two types of fermentation.</li> <li>-understand how electron transfer releases energy in Electron Transport Chain.</li> <li>-understand oxidative phosphorylation.</li> </ul>		<p style="text-align: center;"><u>WEEK – 18</u></p> <p style="text-align: center;"><b>Chapter 14 Respiration</b></p> <p>Read the chapter thoroughly and answer the following questions</p> <p>Q1. What is Glycolysis? Explain the main steps of Glycolysis. Q2. Differentitate between Alcoholic fermentation and Lactic acid fermentation. Q3. Explain TCA cycle in detail with the help of schematic diagram. Q4. What is oxidative phosphorylation? Q5. Explain the steps by which electrons are transferred along the Electron Transport System.</p>

<p>The learner will be able to</p> <ul style="list-style-type: none"> <li>-identify different types of plant growth hormone.</li> <li>-understand which plant hormone is responsible for apical dominance, root and shoot growth, cell elongation, flowering, fruit initiation, internode elongation.</li> </ul>		<p style="text-align: center;"><u>WEEK – 19</u></p> <p style="text-align: center;"><b>Chapter 15</b> <b>Plant Growth and Development</b></p> <p>Read the chapter thoroughly and answer the following questions</p> <p>Q1. Name the hormone that brings Apical dominance. Q2. Where are cytokinins synthesized in plants? Q3. What will happen if terminal bud of a plant is broken? Q4. Which plant hormone promotes ripening of fruits? Q5. What are the functions of Auxins? Q6. Which plant hormone is responsible for internode elongation? Q7. Which organism causes foolish seedling disease or bakanae disease? Q8. Plant hormone can work in two ways. What are they? Explain.</p>
<p>The learner</p> <ul style="list-style-type: none"> <li>- will be able to know the meaning of digestion</li> <li>-will understand the functions of each part of the alimentary canal.</li> <li>- will know the components of the alimentary canal and secretions of the glands</li> <li>-will understand the functions of these enzymes.</li> </ul> <ul style="list-style-type: none"> <li>-will be able to differentiate aerobic and anaerobic respiration.</li> <li>-will understand the physical and chemical part of respiration</li> </ul>		<p style="text-align: center;"><u>WEEK – 20</u></p> <p style="text-align: center;"><b>CHAPTER -16</b> <b>DIGESTION AND ABSORPTION</b></p> <p>Read the chapter and try to understand it thoroughly and answer the following questions:</p> <p>Q1. What is digestion? Q2.Explain how food is digested in the oral cavity, stomach and intestine. Q3.Mention the components of saliva and write their functions. Q4.What are the enzymes produced in the pancreas? Mention how these enzymes are converted to their active form?</p> <p style="text-align: center;"><b>CHAPTER -17</b> <b>BREATHING AND EXCHANGE OF GASES</b></p> <p>Read the chapter thoroughly and answer the following questions.</p> <p>Q1.Differentiate between Aerobic and Anaerobic Respiration.</p>

<p>-will understand how gases are transported within the body</p> <p>-will understand the causes of certain pulmonary diseases.</p>		<p>Q2. With a suitable diagram, describe the functions of various parts of respiratory system?</p> <p>Q3. List out the various steps involved in mechanism of respiration?</p> <p>Q4. Define:</p> <p>i) Vital capacity</p> <p>ii) Total lung capacity</p> <p>iii) Functional residual capacity</p> <p>Q5. What is Bohr effect?</p> <p>Q6. Explain how carbon dioxide is carried and transported in human beings.</p> <p>Q7. Write the causes and symptoms of the following:</p> <p>i) Bronchitis</p> <p>ii) Emphysema.</p> <p>iii) Pneumonia</p>
<p>The learner will</p> <p>-understand the basic features and functions of circulatory system.</p> <p>-will be able to discuss the types of blood corpuscles</p> <p>-will understand the physical and chemical part of a circulatory system</p> <p>-will understand the use of artificial pacemaker</p> <p>-will understand the causes of heart diseases.</p>		<p style="text-align: center;"><u>WEEK – 21</u></p> <p style="text-align: center;"><b>CHAPTER- 18</b></p> <p style="text-align: center;"><b>BODY FLUIDS AND CIRCULATION</b></p> <p>Read the chapter thoroughly and answer the following questions.</p> <p>Q1. Write the basic features of circulatory system? Mention the functions of the circulatory system.</p> <p>Q2. What are the 3 types of blood corpuscles? Discuss</p> <p>Q3. The coagulation of blood is a very complex phenomena. Explain the stages.</p> <p>Q4. Draw a well labelled diagram of the muscular pumping organ.</p> <p>Q5. Write notes on-</p> <p>i) Valves in the heart</p> <p>ii) Major blood vessels</p> <p>Q6. What is cardiac Cycle? Explain the sequence of changes in cardiac chambers during one cardiac cycle.</p> <p>Q7. What causes the heart sounds and what are they called ?</p> <p>Q8. What is artificial pacemaker?</p> <p>Q9. Give reasons for the following heart diseases.</p> <p>i) Hypertension</p> <p>ii) Atherosclerosis</p> <p>iii) Heart failure.</p>



**Subject : BIOLOGY CLASS – XII**

Expected Level of Competency / Learning Outcomes	Sources / Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>The learner will be able to understand the</p> <ul style="list-style-type: none"> <li>- basic applications of biotechnology</li> <li>-biotechnological applications in agriculture and medicine</li> <li>-basic concept of gene cloning and its application.</li> <li>-term biopiracy and how it can be exploited.</li> </ul>	<ul style="list-style-type: none"> <li>- Textbook of Biology- NCERT</li> <li>- Textbook of Biology Class XII – SaritaAgarwal</li> </ul>	<p style="text-align: center;"><u>WEEK— 17</u></p> <p style="text-align: center;"><b>Chapter 12</b> <b>Biotechnology and Its Application</b></p> <p>Read the chapter thoroughly and answer the following questions</p> <p>Q1. Write any five (5) basic applications of biotechnology. Q2. What are transgenic crops? Mention any four advantages of producing transgenic crops. Q3. From which organism is Bt gene taken? Explain the mode of action of Bt cotton on bollworm. Q4. Explain how human-insulin is produced using rDNA technology with labeled diagram. Q5. What is gene therapy? Explain the steps in gene therapy to treat ADA deficient patient. Q6. What is gene cloning? Write any four applications. Q7. What is biopiracy? How are industrialised nations exploiting the bioresources?</p>
<p>The learner will be able to understand</p> <ul style="list-style-type: none"> <li>-the important terms in the chapter and is able to differentiate them.</li> <li>-how abiotic factors influence living organisms and their response to it.</li> </ul>		<p style="text-align: center;"><u>WEEK — 18</u></p> <p style="text-align: center;"><b>Chapter 13</b> <b>Organisms and Populations.</b></p> <p>Read the chapter thoroughly and answer the following questions</p> <p>Q1. Define the following terms – (i)Ecology (ii) Ecological niche (iii) Biome Q2. Differentiate between (i)Weather and climate (ii)Habitat and microhabitat (iii)Ectotherms and endotherms Q3. Write the effect of temperature on plants and animals. Q4. Why have conformers not evolved to become regulators?</p>

		<p>Q5. If a marine fish is placed in a fresh water aquarium, will the fish be able to survive? Explain.</p> <p>Q6. What is homeostasis? Explain any two means by which living organisms try to maintain homeostasis.</p>
<p>The learner</p> <p>-Understands the important terms in the chapter and is able to differentiate them.</p> <p>-Understands the adaptations shown by plants and animals according to the environment they live in.</p> <p>-Understands the meaning of population, the factors contributing to the change in population density and the two types of population growth.</p> <p>-learn about the positive and negative interactions found in a community.</p>		<p style="text-align: center;"><u>WEEK — 19</u></p> <p style="text-align: center;"><b>Chapter 13</b> <b>Organisms and Populations.</b></p> <p>Read the chapter thoroughly and answer the following questions</p> <p>Q1. Define the following terms- (i) Camouflage (ii) Biotic potential (iii) Environmental resistance</p> <p>Q2. Differentiate between (i) Xerophytes and hydrophytes (ii) Ectoparasites and endoparasites (iii) Hibernation and aestivation</p> <p>Q3. Write any two adaptations shown by kangaroo rat and camel to survive in hot and dry conditions.</p> <p>Q4. Define population. What are the main factors contributing to the change in population density? When do we have zero population growth?</p> <p>Q5. Compare J-shaped pattern with S-shaped pattern of population growth.</p> <p>Q6. An orchid plant is growing on the branch of a tree. What do you call this interaction between the orchid and the tree? Explain.</p> <p>Q7. Explain parasitism and mutualism with an example.</p>
<p>The learner</p> <p>-Understands the meaning and nature of ecosystem.</p> <p>- Understands the different components of an ecosystem.</p>		<p style="text-align: center;"><u>WEEK — 20</u></p> <p style="text-align: center;"><b>Chapter 14</b> <b>Ecosystem</b></p> <p>Read the chapter thoroughly and answer the following questions</p> <p>Q1. Define ecosystem. Why is it called an open system?</p> <p>Q2. Explain the structural components of an ecosystem.</p>

<p>-learn about nutrient cycling and the two types of biogeochemical cycles.</p>		<p>Q3. Name the four functional component of an ecosystem.  Q4. Describe pond as an ecosystem.  Q5. Why are nutrient cycles called biogeochemical cycles?  Q6. Differentiate between gaseous and sedimentary cycle.  Q7. How is CO<sub>2</sub> returned back to the atmosphere?</p>
<p>The learner</p> <ul style="list-style-type: none"> <li>-Understands the meaning of biodiversity and the different levels.</li> <li>-Understands why the estimated range of biodiversity is wide.</li> <li>-will be able to explain how biodiversity varies with changes with latitude and altitude.</li> <li>-learn about the effects of loss of biodiversity</li> <li>-will be able to explain the three types of processes that lead to extinction of species.</li> </ul>		<p style="text-align: center;"><u>WEEK — 21</u></p> <p style="text-align: center;"><b>Chapter 15</b>  <b>Biodiversity and Conservation</b></p> <p>Read the chapter thoroughly and answer the following questions</p> <p>Q1. Define biodiversity. Name the three hierarchical levels of biodiversity.  Q2. Why is the estimated range of biodiversity so wide?  Q3. Explain how biodiversity varies with the changes in latitude and altitude.  Q4. Write the effects of loss of biodiversity.  Q5. Explain the three types of processes that lead to extinction of species.</p>

**Subject : GEOLOGY Class – XI**

Expected Level of Competency/ Learning Outcomes	Source / Resource	Week-wise suggestive activities (to be guided by Teachers)
<p><b>Learners</b> -will be able to differentiate ordinary light and polarised light.</p> <p>-will be able to explain refractive index and double refraction of minerals.</p>	<p>Textbook of Geology- G.B. Mahapatra</p> <p>Unit- 2 (V) Introduction to optical mineralogy</p>	<p><u>WEEK – 17</u></p> <p>Read the chapter carefully and make a notes on the following:</p> <ol style="list-style-type: none"> <li>1. Differentiate between ordinary and polarised light.</li> <li>2. Explain double refraction of a mineral.</li> </ol> <p><b>Activity:-</b></p> <ol style="list-style-type: none"> <li>1. Draw double refraction in Calcite mineral.</li> </ol>
<p>-will be able to identify minerals under plane polarised light.</p> <p>-will be able to identify minerals under cross nicols.</p>	<p>Textbook of Geology- G.B. Mahapatra</p> <p>Unit-3 (i)</p>	<p><u>WEEK – 18</u></p> <p>Read the chapter carefully and make a notes on the following:</p> <ol style="list-style-type: none"> <li>1. Write the optical properties of Quartz, Feldspar and Hornblende.</li> </ol> <p><b>Activity:-</b></p> <ol style="list-style-type: none"> <li>1. List the minerals having pleochroism.</li> <li>2. Draw a diagram of cross-hatch twinning in microcline.</li> <li>3. Study optical properties of minerals with image at <a href="https://geologyscience.com/minerals/">https://geologyscience.com/minerals/</a></li> </ol>
<p>-will be able to define the rocks and its type.</p> <p>-will be able to define the type and composition of magma</p>	<p>Textbook of Geology- G.B. Mahapatra</p> <p>Unit-3 (ii)</p>	<p><u>WEEK – 19</u></p> <p>Read the chapter carefully and make a notes on the following:</p> <ol style="list-style-type: none"> <li>1. Define Rocks. Elucidate the different types of rocks.</li> <li>2. What is magma? Also write a note on composition of magma.</li> </ol> <p><b>Activity:-</b></p> <ol style="list-style-type: none"> <li>1. Draw a diagram of rock cycle.</li> </ol>

<p>-will be able to explain the texture of igneous rocks such as crystallinity, granularity and fabric of igneous rocks.</p> <p>- will be able to explain the mode of occurrence of Igneous rocks such as concordant and discordant bodies.</p>		<p style="text-align: center;"><u>WEEK –20</u></p> <p>Read the book carefully and make a notes on the following:</p> <ol style="list-style-type: none"> <li>1. Write notes on fabric of igneous rock.</li> <li>2. Differentiate between concordant and discordant igneous intrusion.</li> </ol> <p><b>Activity:-</b></p> <ol style="list-style-type: none"> <li>1. Find out porphyritic and poikilitic texture of igneous rocks.</li> <li>2. Draw a diagram of Sills and Dykes.</li> </ol>
<p><b>Learner</b></p> <p>-will be able to classify igneous rocks based on mineralogy and texture.</p> <p>-will be able to understand the mineralogical composition and texture of common igneous rocks.</p>	<p style="text-align: center;">Textbook of Geology- G.B. Mahapatra Unit-3 (ii)</p>	<p style="text-align: center;"><u>WEEK –21</u></p> <p>Read the book carefully and make a notes on the following:</p> <ol style="list-style-type: none"> <li>1. Write a note on mineralogical classification of igneous rocks.</li> <li>2. Write a note on textural classification of igneous rocks.</li> <li>3. Elucidate the mineral composition and texture of Granite.</li> </ol> <p><b>Activity:-</b></p> <ol style="list-style-type: none"> <li>1. Find out the picture of Basalt at <a href="https://geology.com/rocks/basalt.shtml">https://geology.com/rocks/basalt.shtml</a></li> </ol>

**Subject : GEOLOGY Class – XII**

Expected Level of Competency / Learning Outcomes	Source / Resource	Week-wise suggestive activities (to be guided by Teachers)
<p><b>Learners</b>                      -will be able to understand the importance of economic geology in every day life.                      - will be able to define ore deposits, gangue, and tenor.                      - will have an idea of magmatic and hydrothermal mineral deposits.</p>	<p>Textbook of Geology                      G.B Mahapatra.</p>	<p style="text-align: center;"><u>WEEK— 17</u></p> <p>Read the chapter carefully and make a notes on the following:</p> <p>Assignment:</p> <ol style="list-style-type: none"> <li>1. What is the difference between mineral and ore mineral?</li> <li>2. Name the mineral formed by segregation, injection, desimination, hydrothermal processes.</li> </ol>
<p>-will be able to understand the mineral deposits formed by residual concentration, mechanical concentration, sedimentation and metamorphic processes</p>	<p>Textbook of Geology                      G.B Mahapatra.</p>	<p style="text-align: center;"><u>WEEK — 18</u></p> <p>Read the chapter carefully and make a notes on the following:</p> <p>Assignment :</p> <ol style="list-style-type: none"> <li>1. What is the difference between residual and mechanical concentration process?</li> <li>2. What are the different types of placers deposits?</li> <li>3. What factors are responsible for placer deposits?</li> <li>4. Write the difference between metamorphic and metamorphosed mineral deposits.</li> <li>5. Name the mineral deposits formed by sedimentary and metamorphic processes.</li> </ol>

<p>-will be able understand hydrological cycle and the relation of hydrological cycle with precipitation.</p> <p>-will be able to list and identify types of water present in the rocks.</p> <p>-will be able to relate ground water occurrences with porosity, permeability and transmissibility of rocks.</p>	<p>Principles of engineering Geology KM Bangar.</p> <p>Notes prepared by MBSE which are not available in the textbook.</p>	<p style="text-align: center;"><u>WEEK — 19</u></p> <p>Activity:</p> <ol style="list-style-type: none"> <li>1. Name the different zone of ground water occurrences.</li> <li>2. Where will you find artesian wells?</li> <li>3. What are the different types of precipitation?</li> <li>4. Name the types of aquifer found in your area.</li> </ol>
<p>-will be able to understand the engineering properties of rock for building purposes.</p> <p>-will be able to understand parts and types of dams so that what kind of dam will be most appropriate for construction on the proposed area.</p> <p>-will be able to find out the causes and types of landslides likely to occur in an area.</p>	<p>Principles of engineering Geology KM Bangar.</p>	<p style="text-align: center;"><u>WEEK — 20</u></p> <p>Read the chapter carefully and make a notes on the following:</p> <p>Assignment :</p> <ol style="list-style-type: none"> <li>1. How do mineral composition, texture, structure, porosity, permeability, durability, strength and heat resistance plays an important role in construction purposes?</li> <li>2. What are the geological considerations for the construction of dam?</li> <li>3. Write five ways in which you can prevent landslides in an area.</li> </ol>
<p>-will be able to understand the causes of earthquakes and the types of earthquakes.</p> <p>-will be able to understand the ways in which air and water are polluted, and how these pollutants produced green house effect thus causing global warming.</p>	<p>Principles of engineering Geology KM Bangar.</p> <p>Notes prepared by MBSE which are not available in the textbook.</p>	<p style="text-align: center;"><u>WEEK — 21</u></p> <p>Read the chapter carefully and make a notes on the following:</p> <ol style="list-style-type: none"> <li>1. What are the effects of earthquakes? Explain how earthquakes and Tsunami are related?</li> <li>2. Name some of the common water and air pollutants.</li> </ol>

**Subject : BUSINESS STUDIES Class – XI**

<b>Expected Level of Competency/Learning Outcomes</b>	<b>Sources / Resources</b>	<b>Week-wise suggestive activities (to be guided by Teachers)</b>
<p>The learner will be able to :</p> <ul style="list-style-type: none"> <li>-know the concept of social responsibility of business</li> <li>-Understand the two cases for social responsibility</li> </ul>	<p>Theme 6 – Social Responsibility and Ethics of Business</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ol style="list-style-type: none"> <li>1.Learn the meaning of social responsibility</li> <li>2.Read and discuss the arguments in favour of and against Assuming social responsibility.</li> </ol>
<p>Grasp the social responsibility towards different interest groups</p>	<p>Theme 6 – Social Responsibility and Ethics of Business</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>Read thoroughly and describe the social responsibility towards –</p> <ul style="list-style-type: none"> <li>-Owners/Investors</li> <li>-Workers/Employees</li> <li>-Consumers/Customers</li> <li>-Government</li> <li>-Community and public</li> </ul>
<ul style="list-style-type: none"> <li>-To know and understand Internal trade</li> <li>-Gain knowledge about the services of Wholesalers and Retailers</li> </ul>	<p>Theme 9 – Internal Trade</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ol style="list-style-type: none"> <li>1.Learn the meaning of Internal Trade</li> <li>2.Explain the meaning of Wholesale Trade and Retail Trade</li> <li>3.Discuss the services of Wholesaler towards producer and retailers</li> <li>4.Discuss the services of retailers towards wholesalers and consumers</li> </ol>
<p>Comprehend Large scale Retailers</p> <ul style="list-style-type: none"> <li>-Departmental stores</li> <li>-Chain stores</li> <li>-Mail Order business</li> </ul>	<p>Theme 9 – Internal Trade</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>1.Read thoroughly and learn the concept of <ul style="list-style-type: none"> <li>-Departmental stores</li> <li>-Chain stores</li> <li>-Mail Order business</li> </ul> </li> <li>2.Understand and explain the merits and demerits of <ul style="list-style-type: none"> <li>-Departmental stores</li> <li>-Chain stores</li> <li>-Mail Order business</li> </ul> </li> </ol>
<ul style="list-style-type: none"> <li>-To know and understand Automatic Vending Machine</li> <li>-Gain knowledge about the main documents used in Internal trade</li> </ul>	<p>Theme 9 – Internal Trade</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ol style="list-style-type: none"> <li>1.What is the meaning of Automatic Vending machine?</li> <li>2.Explain the main documents of internal trade – <ul style="list-style-type: none"> <li>-Invoice</li> <li>-Proforma invoice</li> <li>-Debit note</li> <li>-Credit note</li> <li>-Lorry receipt</li> <li>-Railway receipt</li> </ul> </li> </ol>



**Subject : BUSINESS STUDIES Class – XII**

<b>Expected Level of Competency / Learning Outcomes</b>	<b>Sources / Resources</b>	<b>Week-wise suggestive activities (to be guided by Teachers)</b>
<p>The learner :</p> <ul style="list-style-type: none"> <li>– knows the concept, importance and process of Staffing.</li> <li>– comprehends recruitment and its sources.</li> <li>– as the ability to elaborate the steps in the selection of employees.</li> <li>– knows the concept of training and development.</li> </ul>	<p>Comprehensive Business Studies Class- 12. Laxmi Publications (P) Ltd. Part A – Principles and Functions of Management. Theme 6 : Staffing.</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ol style="list-style-type: none"> <li>1. Read and learn the meaning of Staffing, Recruitment, Training and Development.</li> <li>2. Justify the importance of Staffing.</li> <li>3. State and explain the steps involved in staffing process.</li> <li>4. Describe the two sources of recruitment.</li> <li>5. To know the steps involved in the selection of employees.</li> </ol>
<p>The learner :</p> <ul style="list-style-type: none"> <li>– will have the ability to define Directing and grasp its importance. He/She will also have understanding of Supervision and Motivation and their importance in an organization.</li> </ul>	<p>Part A – Principles and Functions of Management. Theme -7: Directing.</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>1. To learn the concept and importance of Directing.</li> <li>2. To know the meaning of Supervision and explain the functions of Supervisor.</li> <li>3. Define Motivation and describe Maslow’s hierarchy of needs.</li> </ol>
<p>The learner :</p> <ul style="list-style-type: none"> <li>– perceives the meaning of financial incentives and its types.</li> <li>– grasp the concept of Leadership and Communication and other related aspects.</li> </ul>	<p>Part A- Principles and Functions of Management. Theme -7: Directing.</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <ol style="list-style-type: none"> <li>1. To know the meaning of Financial incentives and its types.</li> <li>2. To learn the concept of Leadership and the qualities of a good leader.</li> <li>3. Knowing the concept of communication and differentiate between formal and informal communication.</li> </ol>
<p>The learner:</p> <ul style="list-style-type: none"> <li>– gains knowledge about the concept and importance of controlling as well as the steps in the control process.</li> </ul>	<p>Part A: Principles and Functions of Management. Theme-8: Controlling.</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <ol style="list-style-type: none"> <li>1. To learn and understand the concept and importance of Controlling.</li> <li>2. Enumerate the steps in the process of Control.</li> </ol>

<p>The learner :</p> <ul style="list-style-type: none"> <li>- becomes capable of defining marketing management and its functions.</li> <li>- understands the concept of marketing mix and the elements that constitute the marketing mix.</li> </ul>	<p>Part B: Business Finance and Marketing. Theme-11: Marketing Management.</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <ol style="list-style-type: none"> <li>1. To define marketing management and describe the functions of marketing.</li> <li>2. To learn the concept of marketing mix and the elements that makes up marketing mix, viz. Product, Price, Physical distribution.</li> </ol>
<p>The learner :</p> <ul style="list-style-type: none"> <li>- acquires knowledge about Promotion, Advertising, Personal selling, Sales promotion and other related aspects.</li> </ul>	<p>Part B: Business Finance and Marketing. Theme-11: Marketing Management.</p>	<p style="text-align: center;"><u>WEEK – 22</u></p> <ol style="list-style-type: none"> <li>1. To learn the concept of Promotion, Advertising, Personal selling and Sales promotion.</li> <li>2. Explain the elements of Promotion, objections against advertising, qualities of a good salesman and techniques of sales promotion.</li> </ol>
<p>The learner :</p> <ul style="list-style-type: none"> <li>- understands the concept of consumer protection and the rights and responsibilities of consumers.</li> <li>- has the ability to determine the consumer grievances redressal agencies under the Consumer Protection Act.</li> </ul>	<p>Part B: Business Finance and Marketing. Theme 12: Consumer Protection.</p>	<p style="text-align: center;"><u>WEEK – 23</u></p> <ol style="list-style-type: none"> <li>1. To know the concept of Consumer Protection.</li> <li>2. Describe the rights and responsibilities of consumers.</li> <li>3. Identify and learn the Consumer grievances redressal agencies under the Consumer Protection Act.</li> </ol>

**Subject : ACCOUNTANCY Class – XI**

Expected Level of Competency/Learning Outcomes	Sources/Resources	Week-wise suggestive activities (to be guided by Teachers)
Learner will know how to prepare and maintain Cash Book and other subsidiary books	<p>Chapter 6 :Accounting for Cash- Cash Book</p> <p>And</p> <p>Chapter 7: Non-Cash Transactions-Subsidiary Books</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <ol style="list-style-type: none"> <li>1. Cash Book: Meaning, Types of Cash Book,</li> <li>2. Simple or Single Column Cash Book Format</li> <li>3. Cash Book with Bank Column (Double Column Cash Book)</li> </ol> <p><i>Works to be done: Note down and learn from the illustrations by applying the Rules of Debit and Credit and solve the problems given at the end.</i></p> <ol style="list-style-type: none"> <li>1. Subsidiary books: Meaning, Classification</li> </ol> <p>**Special Journal (Subsidiary Books)            *Purchase Book            *Sales Book            *Purchases Return Book            *Sales Return Book</p> <p><i>Works to be done: Note down learn each of the format by seeing the illustration and solve similar problems given at the end.            @@ Assignment must be given by the teacher</i></p>
Learner will know the process of “posting to ledger” from journal entries	Chapter 8: Ledger Accounts	<p style="text-align: center;"><u>WEEK – 18</u></p> <ol style="list-style-type: none"> <li>1. Ledger : Meaning, Format of Ledger Account.</li> </ol> <p>*Classification of Ledger Accounts</p> <ol style="list-style-type: none"> <li>(a) Assets Accounts</li> <li>(b) Liabilities Accounts</li> <li>(c) Capital Accounts</li> <li>(d) Revenue Accounts</li> <li>(e) Expenses Accounts</li> </ol> <ol style="list-style-type: none"> <li>2. Ledger Posting from Journal Entries.</li> <li>3. Balancing of Ledger Account</li> </ol> <p><i>Works to be done: Note down the format of Ledger Account and go through thoroughly the column explanation. See the Journal Entries from illustrations and post it to the particular ledger accounts---one by one</i></p> <ul style="list-style-type: none"> <li># Ledger posting from Cash Book</li> <li># Ledger posting from Purchase Book</li> <li># Ledger posting from Sales Book</li> <li># Ledger posting from Sales Return Book</li> <li># Ledger posting from Purchases Return Book</li> </ul>

		<p># Ledger posting from Bills Receivable Book</p> <p># Ledger posting from Bills Payable Book</p> <p>4. Summary of Rules of Posting from Subsidiary Books</p> <p>5. Preparation of Assets, Liabilities, Capital, Revenue and Expenses Accounts</p> <p>**Assignments must be given by the teachers.</p>
<p>Learner will know how to prepare Trial Balance and how to handle the problems related to difference in cash book and bank passbook entries.</p>	<p>Chapter 9: Trial Balance</p> <p>And</p> <p>Chapter 10: Bank Reconciliation Statement</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>1. Trial Balance: Meaning, Objectives, Preparation</p> <p>2. Format of Trial Balance</p> <p>3. Methods of preparing Trial Balance</p> <p><i>Works to be done: Note down the format and go thoroughly the steps/methods and learn from the illustrations and solve similar problems given at the text.</i></p> <p>1. Bank Reconciliation Statement(BRS): Meaning, Need and importance</p> <p>2. Preparation of Bank Reconciliation Statement</p> <p><i>Works to be done: Go through thoroughly the causes responsible for the difference between cash book and pass book. Read the steps for preparation of BRS, identify the cases of minus and plus balance, see the summarized BRS and with the help of teacher see illustrations and solve the similar problems given at the end</i></p> <p>** Assignments must be given by the teacher</p>
<p>Learner will know how to calculate Gross profit/loss by preparing Trading Account.</p> <p>Learner will also learn how to calculate Net profit /loss by preparing Profit and Loss Account and,</p> <p>learner will also learn how to prepare Balance Sheet.</p>	<p>Chapter 14 Financial Statements (Without Adjustments)</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>1. Financial Statements: Meaning, Users</p> <p>(a) Trading Account: Pro forma of Trading Account.</p> <p>**Direct Expenses</p> <p>**Gross Profit or Gross Loss :Meaning and Steps to calculate gross profit/loss</p> <p><i>Works to be done: Go through thoroughly the meaning and items of direct expense and note down the Trading Account Pro forma , items that are to be on Credit and debit sides. See illustrations and solve similar problems given at the text.</i></p> <p>(b) Profit and Loss Account</p> <p>**Net Profit or Net Loss :Meaning and steps to calculate Net Profit/Loss</p> <p><i>Works to be done: Go through thoroughly the meaning and items of indirect expenses and note down the Profit and Loss Account</i></p>

		<p><i>Pro forma , items that are to be on Credit and debit sides. See illustrations and solve similar problems given at the text</i></p> <p>(c) Balance Sheet : meaning , Items of Balance Sheet-Capital +Liabilities = Assets and its presentation</p> <p>*Grouping and Marshalling of Assets and Liabilities</p> <p>*Classification of Assets and Liabilities</p> <p>*Miscellaneous Assets and Liabilities</p> <p><i>Works to be done: Go through thoroughly the meaning and items of Balance sheet and Pro forma for presentation. See illustrations and solve similar problems given at the text.</i></p> <p>** Assignments must be given by the Teacher</p>
<p>Learner will understand how to calculate adjustments and to prepare final accounts.</p>	<p>Chapter 15: Financial Statements (With Adjustments)</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>1. Financial Statements with Adjustments : Meaning,</p> <p>**Know this simple rule- whatever they had shown in adjustment(s)/additional information(s) must be shown in two places (like)---</p> <p style="padding-left: 40px;">*In Trading Account and Profit and Loss Account</p> <p style="text-align: center;">Or</p> <p style="padding-left: 40px;">*In Trading Account and Balance Sheet</p> <p style="text-align: center;">Or</p> <p style="padding-left: 40px;">*In Profit and Loss Account and Balance Sheet</p> <p><i>Works to be done: Learn the various adjustments, how it effects in Final Accounts one by one. Learn from the illustrations and prepare Trading Accounts ,Profit and Loss Accounts and Balance Sheets by solving similar problems given at the text.</i></p> <p>** Assignments must be given by the teacher.</p>

**Subject : ACCOUNTANCY Class – XII**

Expected Level of Competency/Learning Outcomes	Sources/Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>Learner will understand the meaning of goodwill and will also be able to calculate the value of goodwill by using various methods.</p>	<p>Chapter-1 Accounting for Partnership Firms (Goodwill)</p>	<p style="text-align: center;"><u>WEEK – 17</u></p> <p>1. Goodwill: Meaning, Significance. 2. Need for Valuation of Goodwill. <i>(Note: Read the statement thoroughly, note down the important statements)</i> 3. Calculation of Goodwill: Learn the Three Methods:- (a) Average Profit Method (b) Super Profit Method (c) Capitalization Method <i>(Note: See the illustrations and solve the related problems)</i> <i>View Youtube and Note Down On Your Notebook: Class XII, Accountancy II Calculation of Goodwill.</i> Link: <a href="https://youtu.be/HYe01ykmScs">https://youtu.be/HYe01ykmScs</a> **Assignments must be given by the Teacher</p>
<p>Learner will be able to solve various problems related to admission of partner in the firm.</p>	<p>Chapter-3 Accounting for Partnership Firms (Admission of a Partner)</p>	<p style="text-align: center;"><u>WEEK – 18</u></p> <p>1. Accounting Effect of Admission of a Partner *Change in the Profit Sharing Ratio <i>Note: See the illustrations and solve the related problems given in the text.</i> *Application of AS-10 and AS-26 (Treatment of Goodwill/ Hidden Goodwill) <i>Note: Distribution of Goodwill at the time of admission, note down the illustrations and continue to solve the given practical problems given in the text.</i> 2. Revaluation of Assets and Liabilities at the time of admission (<b>go through thoroughly</b>) *Format of Revaluation Account *Preparation of Capital/Cash Accounts *Preparation of Balance Sheet <i>Note: See illustrations and solve practical problems given in the text</i> *Treatment of Unrecorded Assets and Liabilities *Treatment of Workmen Compensation Fund *Treatment of Investment Fluctuation Fund/Reserve <i>View: Youtube and Note Down On Your Notebook: Accountancy Admission of a</i></p>

		<p><i>Partner</i>  <i>Link: <a href="https://youtu.be/uOD_X7fNa-M">https://youtu.be/uOD_X7fNa-M</a></i>  <i>** Assignments must be given by the Teacher</i></p>
<p>Learner will understand partner retirement and will be able to solve the related financial problems by treating with the principles of accounting.</p>	<p>Chapter 4: Accounting for Partnership Firms (Retirement of a Partner)</p>	<p style="text-align: center;"><u>WEEK – 19</u></p> <p>1. Calculation of New and Gaining Ratio  <i>Note: See and note down the illustrations and solve the related problems given in the text.</i>  <i>View and note down: Youtube Class-XII, Accountancy // Retirement of a partner Ratio</i>  <i>Link : <a href="https://youtu.be/clPHwvOrrDO">https://youtu.be/clPHwvOrrDO</a></i></p> <p>2. Treatment of Goodwill (As per AS-10 and As-26)  <i>View: Class-XII, Accountancy // Retirement of a Partner Treatment of Goodwill</i>  <i>Link: <a href="https://youtu.be/SPJXdn7eM20">https://youtu.be/SPJXdn7eM20</a></i></p> <p>3. Revaluation of Assets and Liabilities</p> <p>4. Treatment of Various Cases-  * Accumulated/Undivided Profit  * Calculation of Amount Payable to Retiring Partner  * Sale of Unrecorded Investments  * Payment of Unrecorded Liabilities</p> <p>5. Preparation of New Balance Sheet  <i>Illustrations: with the help of the teacher an illustrations given at the text must be explained</i>  <i>** Assignments must be given by the Teacher</i></p>
<p>Learner will be able to solve the problems related to death of a partner</p>	<p>Chapter 5: Accounting for Partnership Firms (Death of a Partner)</p>	<p style="text-align: center;"><u>WEEK – 20</u></p> <p>1. Calculation of Deceased Partners' s  * Share of Profit  * Interest on Capital  * Share in Accumulated Profit  * Share in the Goodwill  <i>Note: see and note down the illustrations and solve related problems given at the text</i></p> <p>2. Treatment of Goodwill</p> <p>3. Revaluation of Assets and Re-assessment of Liabilities</p> <p>4. Preparations of Deceased Partner's Executor's Account</p> <p>5. Preparation of Balance Sheet.  <i>Illustrations: with the help of the teacher an illustrations given at the text must be explained</i>  <i>** Assignments must be given by the Teacher</i></p>

<p>Learner will able to differential the three activities like, Operating, Investing and Financing so as to prepare Cash Flow Statement</p>	<p>Chapter 15: Cash Flow Statement</p>	<p style="text-align: center;"><u>WEEK – 21</u></p> <p>1.Cash Flow Statement  *Meaning of Cash and Cash Equivalent  *Advantages of Cash Flow Statement  2.Procedure for Preparing Cash Flow Statement (<i>Go through thoroughly the steps</i>)  Step 1: Cash Flow from Operating Activities  *Receipts Items  *Payments Items  <i>Illustrations: see and note from the illustrations and solve the related problems</i>  <i>Explanation: The Teacher must explain by solving the related problems in the first Step.</i>  <i>Assignments: Must be given by the teachers</i></p> <p>Step 2: Cash Flow from Investing Activities  *Purchases Items  *Sales Items  <i>Illustrations: see and note from the illustrations and solve the related problems</i>  <i>Explanation: The Teacher must explain by solving the related problems in the second Step.</i>  <i>Assignments: Must be given by the teachers</i></p> <p>Step 3: Cash Flow from Financing Activities  *Receipts Items  *Payments Items  <i>Illustrations: see and note from the illustrations and solve the related problems</i>  <i>Explanation: The Teacher must explain by solving the related problems in the third Step.</i>  <i>Assignments: Must be given by the teachers</i></p>
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**Subject: BUSINESS MATHEMATICS Class – XI**

Expected Level of Competency / Learning Outcomes	Sources / Resources	Week-wise suggestive activities (To be guided by Teachers)
<p>Upon completion of this lesson, students will be able to:</p> <p>(i) Calculate profit.</p> <p>(ii) Identify the impact of profit and loss can have on a business.</p> <p>(iii) Analyse the factors that influence the level of profit/loss made by a business.</p>	<p><u>THEME:</u> <b>Profit and Loss</b></p> <p><u>TEXTBOOK:</u> A text book of Commercial Arithmetic by P.L Ganguly.</p>	<p><u>WEEK – 17</u></p> <p>Concept of Profit and Loss and related terms/definition. i.e.C. P, S.P, Gross profit, Net profit, Direct cost and Indirect cost, Depreciation, Discount, Market price.</p> <p>Teacher will give activity or test from previous week. Then, proceed to Chapter-vii: (Q. 1-10). And, example given in text book.</p> <p>Activity will be given based on this chapter.</p>
<p>Upon completion of this lesson, students will be able to:</p> <p>(i) Know and use Compound Interest terminology.</p> <p>(ii) Understand when and how interest is paid.</p> <p>(iii) Understand when interest is earned.</p> <p>(iv) Calculate simple interest base on compound interest formula.</p> <p>(v) Calculate the total amount of a loan or total value of an investment at the time of a specified term.</p> <p>(vi) Understand how to algebraically manipulate the interest formulas to solve two different variables.</p>	<p><u>THEME:</u> <b>Compound Interest</b></p> <p><u>TEXT BOOK:</u> A text book of Commercial Arithmetic by P.L Ganguly</p>	<p><u>WEEK – 18</u></p> <p>Concept of compound Interest, i.e Interest period, Compound Interest with and without Logarithm. (With applications).  <math>C.I=A-P</math>  <math>A=P(1+i)^n</math>  <math>A=P(1-i)^n</math>                      Chapter-xii: (Q.1-Q.7) and example given in Text Book.</p> <p>Test or work will be given by the teacher after completion.</p>

<p>Upon completion of this lesson, students will be able to:</p> <p>(i) Understand and know how to compute interest charge based on original balance.</p> <p>(ii) Understand and know how to compute interest charge based on reducing balance.</p> <p>(iii) Understand and know Revenue and Expense.</p> <p>(iv) Know there is a degree of uncertainty in the collection of cash.</p> <p>(v) Know ownership is not fully transferred at the point of sale.</p>	<p><b><u>THEME:</u></b> <b>Instalment</b></p> <p><b><u>TEXT BOOK:</u></b> A text book of Commercial Arithmetic by P.L Ganguly</p>	<p><b><u>WEEK – 19</u></b></p> <p>Teacher will give a lesson according to student needs. Relation between instalment, Simple Interest and C.I will be introduced.</p>
<p>Upon completion of this lesson, students will be able to:</p> <p>(i) Solve problem using the Laws of Logarithms.</p> <p>(ii) Solve problem easily and without almost any error.</p> <p>(iii) transform some problem in Linear equation by using Logarithm.</p> <p>(iv) apply application in business.</p>	<p><b><u>THEME:</u></b> <b>Logarithm</b></p> <p><b><u>TEXT BOOK:</u></b> A text book of Commercial Arithmetic by P.L Ganguly</p>	<p><b><u>WEEK – 20</u></b></p> <p>Intoduction and definition of logarithms, Laws of logarithms, change of base, use of logarithms in multiplication, common Logarithms, antilogarihms, characteristic and Mantissa.</p>
	<p><b><u>THEME:</u></b> <b>Logarithm</b></p> <p><b><u>TEXT BOOK:</u></b> A text book of Commercial Arithmetic by P.L Ganguly</p>	<p><b><u>WEEK – 21</u></b></p> <p>Test or activity will be given. Then, Proceed to Chapter-x some related problem and example.</p>

**Subject : BUSINESS MATHEMATICS Class – XII**

Expected Level of Competency / Learning Outcomes	Sources / Resources	Week-wise suggestive activities (to be guided by Teachers)
<p>Upon completion of this lesson, students will be able to:</p> <p>(i) Define “Proportion”</p> <p>(ii) Understand the concept of Ratio and proportion.</p> <p>(iii) Understand rate and how it relates to ratio.</p> <p>(iv) Know how to determine ratio and proportion.</p> <p>(v) Understand rate and how it relates to ratio and proportion.</p> <p>(vi) Apply in real- life.</p>	<p><b><u>THEME:</u></b> <b>Ratio and Proportion</b></p> <p><b><u>TEXT BOOK:</u></b> A text book of Commercial Arithmetic by P.L Ganguly.</p>	<p><u>WEEK – 17</u></p> <p>Concept of Ratio and Proportion, Compound rule of three, Compound proportion, Chain rule. Some basic problem and example will be given.</p> <p>Test or activity will be given best on above concept.</p> <p>Problem based on the above concepts. i.e. Chapter-<b>V</b>: Ratio and Proportion. (Q. 1,2,3,4,5,7,8,9,10,12,14,15,17, 21,37,38,47)</p> <p>Chapter-<b>VI</b>: Proportional parts. (Q. 1,2,5,6,7)</p> <p>Online Test or work will be given from these two exercises.</p>
<p>Upon completion of this lesson, students will be able to:</p> <p>(i) Have an idea on cash deposit and withdrawals of cash and already know about partnership.</p> <p>(ii) Have an idea on advantages and disadvantages of partnership.</p> <p>(iii) Know general types of partnership.</p>	<p><b><u>THEME:</u></b> <b>Partnership</b></p> <p><b><u>TEXT BOOK:</u></b> A text book of Commercial Arithmetic by P.L Ganguly.</p>	<p><u>WEEK – 18</u></p> <p>Concept of partnership-agreement, nature of agreement, competence to enter into contract, number of partners, presence of business, sharing of profits and some basic related problems.</p> <p>Application will be given as Assignment or Test.</p> <p>Problem based on the above concepts. i.e. Chapter-<b>XVII</b>: Partnership (Q.1-17) And, example given in the text book.</p> <p>At least one Test will be conducted.</p>

<p>Upon completion of this lesson, students will be able to:</p> <p>(i) Define events, outcomes, trial, simple events, sample space and calculate the probability that an event will occur.</p> <p>(ii) Calculate the probability of events for more complex outcomes.</p> <p>(iii) Solve applications involving probabilities.</p> <p>(iv) Formulate theorem about the concept of probability.</p> <p>(v) Calculate the probabilities using conditional probability.</p> <p>(vi) Explain the concept of random variable and probability distribution.</p>	<p><b><u>THEME:</u></b> <b>Probability</b></p> <p><b><u>TEXT BOOK:</u></b> Senior Secondary School Mathematics for Class 12 R S Aggarwal (13th Edition 2015, 2017 Print)</p>	<p><b><u>WEEK – 19</u></b></p> <p>Introduction, experiment, random experiment, sample space, event, impossible event, sure event, simple event, compound event, mutually exclusive events, occurrence of an event, independent events, complementary events.</p> <p>Exercise-31A: (Q. 1- 10)</p>
	<p><b><u>THEME:</u></b> <b>Probability</b></p> <p><b><u>TEXT BOOK:</u></b> Senior Secondary School Mathematics for Class 12 R S Aggarwal (13th Edition 2015, 2017 Print)</p>	<p><b><u>WEEK – 20</u></b></p> <p>Problem based on conditional probability:</p> <p>Exercise-29A:(Q.1-15)</p> <p>Assignment or test will be given.</p>
<p>Upon completion of this lesson, students will be able to:</p> <p>(i) Formulate a given simplified description of a suitable real-world problem as a linear programming model in general, standard and canonical forms.</p> <p>(ii) Sketch a graphical representation of two-dimensional linear programming model given in general, standard and canonical forms.</p> <p>(iii) Classify a two-dimensional linear programming model by the type of its solution.</p> <p>(iv) Solve a two-dimensional L.P problem graphically.</p>	<p><b><u>THEME:</u></b> <b>Linear Programming</b></p> <p><b><u>TEXT BOOK:</u></b> Senior Secondary School Mathematics for Class 12 R S Aggarwal (13th Edition 2015, 2017 Print)</p>	<p><b><u>WEEK –21</u></b></p> <p>Concept and problems based on EX-33A and 33B (Q.1-6).</p> <p>Assignment will be given.</p>