MIZORAM BOARD OF SCHOOL EDUCATION
AIZAWL – 796 012

Dated Aizawl, the 20th November, 2026

N O T I C E

No.K.12015/1/2026-MBSE(Acad)/7: It is hereby notified for the information of all concerned that sample questions for the five main subjects - English, Mizo, Mathematics, Science and Social Science, are enclosed herewith for reference and to familiarise students with the format and expected standard of questions for the Class – IX Common Question Examinations, 2027.

The sample questions have been prepared in accordance with the existing High School Scheme of Examinations and Question Design. It is further informed that certain questions in the final question papers may be adapted from or based on the sample questions provided.

The Common Question Examinations, 2027 for Class – IX shall be conducted as per the following schedule:

DAY & DATE	TIME	SUBJECTS
18.01.2027 (Monday)	10:00 am – 1:00 pm	Mizo
20.01.2027 (Wednesday)	10:00 am – 1:00 pm	English
22.01.2027 (Friday)	10:00 am – 1:00 pm	Social Science
25.01.2027 (Monday)	10:00 am – 1:00 pm	Mathematics
27.01.2027 (Wednesday)	10:00 am – 1:00 pm	Science

It is further clarified that the Board shall prepare common question papers only for the five subjects specified above. Schools having students offering other language subjects, including Modern Indian Languages other than Mizo, and additional subjects shall make their own arrangements for setting the question papers and conducting the examinations for such subjects. Arrangements for the conduct of practical examinations shall also be made by the respective schools.

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

Memo No.K.12015/1/2026 – MBSE(Acad)/7(A) : Dated Aizawl, the 20th November, 2026

Copy to:

1. P.S to Minister, School Education Department Govt. of Mizoram for information.
2. All District Education Officers, Govt. of Mizoram, with a request to disseminate the information to High Schools within their jurisdiction.
3. Regional Officer, MBSE Lunglei for information.
4. System Administrator, MBSE for information and necessary action.
5. General Secretary, MISSTA for information.
6. Guard File – I.

20/11/2026

(C. LALDINPUIA)
Senior Academic Officer
Mizoram Board of School Education

CQ/27/SAMPLE

CLASS-IX
ENGLISH
FULL MARKS - 80

SECTION - A: READING (10 marks)

1. Read the following passage carefully and answer the questions that follow:

Reading is one of the most valuable habits that a person can develop. It is not merely a way of gaining information; it is also a means of discovering new ideas, understanding people, and exploring different worlds. A good book can take a reader to places they have never visited, introduce them to people they have never met, and allow them to experience situations that are very different from their own lives.

For students, reading has many benefits. It improves vocabulary, develops writing skills, and helps them express their thoughts more clearly. Regular readers often find it easier to understand difficult ideas because reading trains the mind to concentrate and follow a sequence of thoughts. It can also improve imagination. When reading a story, readers create pictures of the characters, places and events in their minds.

In the modern world, however, reading habits are changing. Mobile phones, video games, and social media occupy a large part of many young people's free time. Technology itself is not harmful; in fact, digital devices provide access to millions of books and educational resources. The problem arises when entertainment constantly replaces meaningful reading. Spending hours scrolling through short posts may provide amusement, but it does not always encourage deep thinking or sustained attention.

Developing a reading habit does not require spending several hours with a book every day. Even 15 or 20 minutes of focused reading can be useful. Students can begin with subjects they enjoy- adventure stories, biographies, science, history, travel, or fiction. Gradually, they can explore other kinds of books.

Reading also teaches us to look at the world from different perspectives. A biography may help us understand another person's struggles, while a novel may make us think about choices and relationships. Thus, reading is not simply an academic activity; it is a lifelong habit that can enrich knowledge, imagination, and understanding. A person who reads regularly carries a library of ideas wherever they go.

1.1 On the basis of your reading of the passage, answer the following questions briefly: 3×2=6

(a) Why is reading considered more than just a way of gaining information?

(b) How has technology influenced the reading habits of young people?

(c) Why does the passage suggest that reading enriches a person's life beyond academic achievement?

1.2 Choose the most suitable antonym from the options given below: 2×1=2

(a) sustained

i. continuous
ii. interrupted
iii. prolonged
iv. divided

(b) meaningful

i. significant
ii. valuable
iii. trivial
iv. purposeful

1.3 Find out the words from the passage that mean the same as: 2×1=2

(a) fantasy

(b) enhance

SECTION - B: WRITING (15 marks)

2. a) You have noticed that your school compound and classrooms are becoming dirty due to excessive littering. Design a poster persuading students to keep the school surroundings clean and avoid the use of single-use plastic. (Word limit: 50 words) 5

OR

b) You are on a school trip to Kolkata. Write a postcard to your mother describing the beautiful places you have visited and how much you are enjoying the trip. (Word limit: 50 words) 5

3. You are Remmawia, a resident of 15-A, Green Valley Colony. Write a letter to the editor of a local newspaper expressing concern about the irregular power supply in your locality. Describe how the power cuts create problems for the residents and local businesses, and suggest measures to improve the situation. (Word limit: 150 - 200 words) 10

SECTION - C: GRAMMAR (15 marks)

4. Choose the correct form of the verbs from the given options: 4×1=4

a) She _____ this novel since morning and hasn't finished it yet.
   i. reads ii. has been reading
   iii. is reading iv. read

b) When the police arrived, the thief _____.
   i. has escaped ii. escapes
   iii. had escaped iv. is escaping

c) By next month, I _____ at this school for five years.
   i. will have been teaching ii. will teach
   iii. am teaching iv. have been teaching

d) While I _____ down the street, I saw an old friend.
   i. walk ii. will walk
   iii. have walked iv. was walking

5. Identify and label each sentence as declarative, interrogative, imperative or exclamatory: 4×1=4

a) Where have you been all morning?
b) What a beautiful goal that was!
c) Some of my friends have come to visit my ailing mom.
d) Always obey your elders.

6. Choose the correct option to change the narrative: 4×1=4

a) He said to me, "I can do the work."
   i. He said to me that I can do the work.
   ii. He told me that I can do the work.
   iii. He told me that he could do the work.
   iv. He told to me that he could do the work.

b) Sangi asked him why he was laughing.
   i. Sangi said to him, "Why are you laughing?"
   ii. Sangi said to him, "Why am I laughing?"
   iii. Sangi said to him, "Why you are laughing?"
   iv. Sangi said to him, "Why were you laughing?"

c) Ruata said, "Alas! My pet died!"
   i. Ruata said that alas, his pet died.
   ii. Ruata exclaimed that alas, his pet died.
   iii. Ruata exclaimed sadly that his pet died.
   iv. Ruata exclaimed sadly that his pet had died.

d) Mr. Richard said to me, "Please wait here till I return."
   i. Mr. Richard said that to wait here till I return.
   ii. Mr. Richard said that to wait for him till he returns.
   iii. Mr. Richard requested me to wait here till he returns.
   iv. Mr. Richard requested me to wait there till he returned.

7. Choose the correct preposition from the brackets and fill in the blanks: 3×1=3
   a) My brother's birthday falls _____ 5th May. (on/in/at)
   b) The soldiers are _____ war with each other. (of/at/on)
   c) There is a mutual understanding _____ the two parties. (for/between/among)

SECTION - D: TEXT BOOK (40 marks)

8. Read the extract given below and answer the questions that follow:

"You might as well quit. There are thousands of starfish on this beach."
   a) Who is the speaker of the above lines? To whom is he / she speaking? 2
   b) Why are thousands of starfish on the beach? 2

9. "But there wasn't time to save them."
   a) Who is the speaker of the above line? When did the devastating tsunami hit Japan? 2
   b) Why was the speaker unable to save her elderly parents? 2

10. a) In the story 'Blind Date', how perceptive was the narrator? Support your answer by referring to the details he was able to find out about the waiter, Charlie. (Word limit: 50 – 75) 4

OR

   b) How does the narrator compare his experience of being at school with his experience of learning to swim in China in the story 'Yang, the Youngest'? (Word limit: 50 – 75) 4

11. Have you or anyone you know ever experienced something that could not be explained rationally or scientifically? Relate your response to the events described in the story 'Mysterious Phenomena'. (Word limit: 50 – 75) 4

12. Read the lines from the poem and answer the questions that follow.
"And o'er his heart the shadow
Fell as he found
No spot of ground
That looked like Eldorado."

   a) Name the poet and the poem. 1
   b) Why did a shadow fall over his heart? 1
   c) The word 'shadow' in these lines means: 1
      i. shade ii. despair
      iii. ghost iv. Place

13. Read the lines from the poem and answer the questions that follow. Write your answer in one or two sentences only:

"Still seeking what I sought when but a boy,
New friendship, high adventure, and a crown,
My heart will keep the courage of the quest,
And hope the road's last turn will be the best."

a) What is the poet seeking? Give evidence from the poem to justify your answer. 2

b) Quest means- 1

i. thrilling adventure ii. an inquiry
iii. a long search iv. to give up

14. a) What qualities does the poet admire in animals in the poem 'I Think I Could Turn and Live with Animals'? (Word limit: 50 – 75 words) 4

OR

b) How does the poet wish the tiger to live, in contrast to its life in the cage, in the poem 'A Tiger in the Zoo'? (Word limit: 50 – 75 words) 4

15. Read the extract given below and answer the questions that follow:

a) "By the roadside I saw something on the ground, and when I went closer I found him - with barely any clothes in the snow."

i. Who said these words? To whom were they spoken? 2
ii. What did the speaker do after finding something on the ground? 2

OR

b) "I stopped in at the lunch car for a cup of coffee on my way home, and two men came in. As they were leaving, one dropped the jewel. I ran after him, but they had gone in a big car."

i. Who is the speaker? To whom is he or she speaking? 2
ii. Where did Jim find the diamond? What happened to the two men who had dropped it? 2

16. a) From the story 'The Night We Won the Buick', how would you describe the night the family won the Buick? (Word limit: 50 – 75 words) 4

OR

b) In the story 'A Bond with the Wild', do you think the family's decision to bring Baba back home from the zoo was wise?
(Word limit: 50 – 75 words) 4

17. a) Where does Pip first encounter the terrifying escaped convict? 1

i. Inside the dark village school house
ii. At the local blacksmith's house
iii. In the lonely churchyard near the graves of his parents
iv. By the warm fireplace in his house

b) When the chief's servants arrived at Rimenhawihi's residence, what was her house constructed of? 1

i. stone and timber
ii. thick bamboo and clay
iii. solid teak wood
iv. iron

18. a) The lesson 'Let's Go Home' ends with the hope of returning home. How is having hope important in our lives? (Word limit: 50 – 75 words) 4

OR

b) Today, many people want to become doctors only for money and status. How is Robert Sandy, the surgeon, different from them? (Word limit: 50 – 75 words) 4

CQ/27/SAMPLE

CLASS-IX
MIZO
FULL MARKS - 80

Ṭhen Khatna – HLA (18 marks)

1. A dik ber hmangin dahkhat rawh: 4×1=4

   (a) Ka thlir ngam lo _____ thliak a. (chhawkhlei par/hawilo par/ tlangsam par)
   (b) An awi khua ṭhal _____ kiu chuan. (relthang / lelthang / nuaithang)
   (c) 'Ka Pian Ka Seilenna Ram' tih hla phuahtu chu _____ a ni. (Rokunga / Lalzova / F. Rokima)
   (d) 'Tuai dawn' tih awmzia chu _____ a ni. (fanu / fapa / fa duat lai)

2. (a) A hnuaia hla thu hi Mizo ṭawng tluang pangngaiin dah rawh: 2
   "Berhva lungrual mah hi za te'n an leng a,
   Nang nen run hmuna len ni awm ang maw?"
   (b) 'A Saw Raltiang Tlangah' tih hlain a dah pawimawh leh a ngaihhlut ber chu eng nge ni? Eng nge a chhan sawi bawk rawh. 2

   (c) 'Sem Sem Dam Dam' tih hla behchhanin hmanlai pi pute nun ho lai hlimawm dan tur nia i hriat han ziak teh. 2

3. A hnuaia hla thu hi a ṭobula chhuiin hrilhfiah rawh: 3
   'Huiva len thiamah chang ila,
   Hlim lai ni ka tawng mahna.'

4. 'Buannel' tih hla phuahtuin 'Buannel vangkhua a dai zo ta; Thlaler ram dai a chang zo ta' a tih chhan sawi la, ramngaw humhalh pawimawhna leh ṭul zia han sawi bawk teh. 5

Ṭhen Hnihna – THU (18 marks)

5. Kualkhung chhunga a dik ber thlang chhuak rawh: 4×1=4

   (a) "Ka nu 'hlauh' chu eng nge ngai?" ti tu hming chu _____ (Alexander-a / Game-cock / Admiral Nelson-a / Napoleon-a) a ni.
   (b) Lawichal tih awmzia chu _____ (mo unaupa / man eitute / mo hruai tura an mi ruat / bawngpa chal) tihna a ni.
   (c) Mahni inhneh thei te chu _____ (mi fing / mi chak / mi ropui / mi huaisen) an ni.
   (d) Mihring dikna leh chanvo humhalhtu pawl UNO chu kum _____ (1945 / 1946 / 1948 / 1953) -ah din a ni.

6. ‘Rilru puitling’ ziaktuin mihring min ti mihringtu ber a tih kha eng nge ni? Kan pi leh puten midangte tana ṭangkai taka nun a ṭhatzia sawi nan eng thu nge an sawi? 3

7. Incheina hmantlak ber chu eng nge ni? A hmantlak dan han sawi teh. 3

8. Tun hunah tlawmngaihna leh aia upate zahna hi kan la nunpui ṭha i ti em? Ṭha i tih chhan emaw tih loh chhan han sawi teh. 3

9. ‘Min dawrtu te hi lal an ni’ tih thu hi tu sawi nge? Sumdawngte nihna dik tak kha eng nge ni sawi la, sumdawng hlawhtling ni tura thil pawimawhte kha han sawi bawk teh. 5

Ṭhen Thumna – GRAMMAR (12 marks)

10. A dik ber thlang rawh: 5×1=5
    (a) Aw ____ Ka tihpalh a nih kha. (? / ! / .)
    (b) Mawia a au _____ mai. (mur mur / nak nak / lauh lauh)
    (c) Punctuation zinga chawlhna tawi ber chu _____ a ni. (colon / semi colon / colon)
    (d) Min _____ suh. (tlansan / tlan san)
    (e) Pawl leh a huhova khawsa ṭhinte hming hi _____ a ni. (collective noun / proper noun / common noun)

11. (a) Common gender leh neuter gender danglamna sawi rawh. 2
    (b) Demonstrative pronoun sawifiah la, a tih chianna turin thu phuah rawh. 2

12. Kualkhung chhunga a dik ber hi thlang rawh: 3×1=3
    (a) Theihna lam kawng hi ṭawng upain _____ a ni. (ha hawlh zawng / chem kalna / ar ṭial fin)
    (b) ‘Kawlpui kheng thlawn’ tih hi _____ sawina a ni. (harsatna lian tham su kiang / engthawl hawk / mi pawi khawih palh)
    (c) Mawii te unau inanzia hi chu _____ mai an ni. (themtleng te zawk ang / sa seh kawr ang / zawng fian phel ang)

Ṭhen Lina - LEMCHAN (6 marks)

13. Kualkhung chhunga a dik ber hmangin a kar awlte hi dah khat rawh: 3×1=3
    (a) ‘Ke chheh her’ tih awmzia chu _____ a ni. (kal chak / nun dan thlak / kal muang / ke bai)
    (b) Lungrem chim chuan in _____ lai a hnawl an ti. (pahnih / pathum / pali / pakhat)
    (c) ‘Mi huaisente tan zawng vanduai hi malsawmna ah a chang a, harsatna hi hlawhtlinna rahbi ah a chang chawk reng a nia’ tih hi a sawitu chu _____ a ni. (Kaprumi / Biakhmingi / Zaii / Seni)

14. ‘Lungrem a chim’ tih lemchana hlemhletna avanga vanduaina thlen dan kha han sawi teh. 3

Ṭhen Ngana – THAWNTHU TAWI (5 marks)

15. A kar awlte hi kualkhung chhunga a dik ber hmangin dah khat rawh: 2×1=2
    (a) Thanchhingi te inah Chawngbuanga sipai ṭan hlanin _____ palaite an lo leng. (Zamawia / Zachhunga / Zatluanga / Zahranga)
    (b) Hmanlaia naupang sual hremna chi khat chu _____ a ni. (rihsawi / inhnawk / sihsawi / vihvawi)

16. YMA inkhawm zana zirtirtupain nupui pasal inneih hma lutuk ṭhat lohna leh nula leh tlangval inkawmnaa innel lutuk ṭhat loh dan a sawi kha han ziak teh. 3

Ṭhen Rukna – CHHIAR (5 marks)

17. A hnuaia thu hi ngun takin chhiar la, a thu behchhanin a tawpa zawhna hi chhang ang che:

Harsatna su tlang peihlo chu mi engmah lo, engmah lo ai pawha tlaktlai lo zawk chu a ni. Harsatna kan tawh hian, thlemna a tluk bo palh hlen sam tak a ni reng a, mawhphurhna pumpelh a, kawng awlsam lama dawihzep taka relhruk hi thil chakawm lo zawk zawk a ni lo.

Harsatna chhawr thei tur chuan mahni inthunun thei mi nih a ngai a, hei hi kan dam chhunga thil hluber pakhat a ni ve ngei mai. Mahni inthunun lo chu mi beidawng leh mi hlawhchham an ni fo thin. Mi hlawhtling ni tur chuan mahni inhriat thiamna leh mahni inthlir thiamna neih a ngai a ni.

Harsatna sutkian dan ṭha tak chu tawrh hi a ni. Miin eng pawh ti sela, tuar a huam loh chuan hlawhtlin harsa a ti hle ang. Thil tiha hlawhtling zel theiu tur chuan tuar a ngai a, dawhtheih pawh a ngain a ni. Harsatna tuar hram hram a, vawi hnih khat hlawhchham hnu pawha huaisen taka bei nawn leh tute chu mi hlawhling an lo ni a, lawmna an hmu zawk ṭhin. Mi tam tak chu vanduainaa fiaha an awmin an tling zo ṭhin lo va, an tlu leh mai ṭhin.

Nimahsela, harsatna su tlang a, hnehtu ropui rawn nite chu mi dangte tan lawm tlak, thik tlak, entawn tlak leh zui tlak an lo ni ṭhin.

Harsatna hi siamtu thil thlawn pek a nih avangin kan lawm tur a ni. Harsatna chhawr thiamtute leh huai taka tawntute chu mi hlawhtling an ni fo va, malsawmna an dawng bik ṭhin. Nimahsela, dawihzep avanga pumpelhna zawngtute chu mi hlawhchham an ni fo. Mihring zinga chhiar tel tlak pawh an ni hek lo.

Zawhnate:

(a) Thil tiha hlawhtling zel thei tura thil pawimawhte chu: 1
    i) Dawhtheihna leh hmangaihna

ii) Huaisenna leh dikna
iii) Tuarna leh dawhtheihna

(b) Harsatna su tlang a, hnehtu ropui rawn nite chu heng mi te hi an ni: 1
i) Lawm tlak leh thik tlak
ii) Entawn tlak leh zui tlak
iii) Ngaihsan tlak leh entawn tlak

(c) Kan dam chhunga thil hlu ber pakhat chu: 1
i) Mahni inhneh
ii) Mahni inthunun
iii) Mahni inhriat thiamna

(d) He thu ziaktuin ‘mihring zinga chhiar tel tlak pawh an ni lo’ a tih te kha eng ang mite nge an nih?
2

Ṭhen Sarihna – ZIAK (8 marks)

18. A hnuaia thupui i duh zawk zawk hmang hian thumal 200 – 250 vel hmangin essay han ziak teh. 5

(a) Tunlai Mizo nuna tlawmngaihna
(b) Ram hmasawnna leh ramngaw humhalh a indal em?

19. Govt. Mualthuam High School ah Science teacher hna a ruak a, he hna dilna hi Director, School Education Department hnena theh luh turin han ziak teh. (I hming Ramhmangaiha, Ramhlun North, Aizawl ti ang che). 3

Ṭhen Riatna – RAPID READER (8 marks)

20. Thanzingan Barbara tana a tih hnuhnung ber kha eng nge? Eng ni ah nge? 2

21. ‘Awi, ka nu, Lucknow!’ tih ṭawngkam lo chhuah dan han sawi teh. 3

22. A thawnthu behchhanin saltangte dinhmun hrehawm dan tur nia i hriat han ziak teh. 3

CQ/27/SAMPLE

CLASS-IX
MATHEMATICS
FULL MARKS – 80

1. Choose the correct answer: $24 \times 1 = 24$

(a) Decimal form of $\frac{48}{100}$ is

(i) 0.48 (ii) 0.84

(iii) 0.048 (iv) 0.084

(b) $16\sqrt{15} \div 4\sqrt{3}$ is equal to

(i) $\sqrt{3}$ (ii) $4\sqrt{3}$

(iii) $4\sqrt{5}$ (iv) $\sqrt{5}$

(c) The cardinal number of A = {a, b, c, d, e, f, g} is

(i) 4 (ii) 5

(iii) 6 (iv) 7

(d) The population of a city is 10,000 and grows at 10% per year. What will be the population after 1 year?

(i) 10,000 (ii) 11,000

(iii) 12,000 (iv) 15,000

(e) In a ratio 11:14, if the antecedent is 66, the consequent will be

(i) 55 (ii) 84

(iii) 70 (iv) 66

(f) The list price of a TV is ₹ 15,000/- and sales tax is charged on it @ 5%. The sales tax charged on it will be

(i) ₹ 550 (ii) ₹ 650

(iii) ₹ 750 (iv) ₹ 850

(g) $x^3 + y^3$ is equal to

(i) $(x + y)(x^2 - xy + y^2)$ (ii) $(xy)(x^2 - xy + y^2)$

(iii) $x^3 + y^3 + 3xy(x + y)$ (iv) $x^3 - y^3 - 3xy(x - y)$

(h) The zero of the polynomial p(x) = 2x – 9 is

(i) $-\frac{9}{2}$ (ii) $\frac{9}{2}$

(iii) $\frac{2}{9}$ (iv) $-\frac{2}{9}$

(i) Assertion (A): The degree of the polynomial $5x^3 - 3x^2 + 7$ is 3

Reason (R) : The degree of a polynomial is the highest power of the variable with a non- zero coefficient

Choose the correct option:

(i) Both A and R are true and R is the correct explanation of A.

(ii) Both A and R are true but R is not the correct explanation of A.

(iii) A is true but R is false.

(iv) A is false but R is true.

(j) Consider the following statements about a triangle:

(a) A triangle can have two right angles.

(b) A triangle can have at most one obtuse angle.

(c) A triangle can have three acute angles.

Which of the statements given above is/are correct?

(i) (b) only (ii) (a) and (b)

(iii) (b) and (c) (iv) (a), (b) and (c)

(k) In ΔABC, AB = AC and ∠B = 40°, then ∠C is equal to

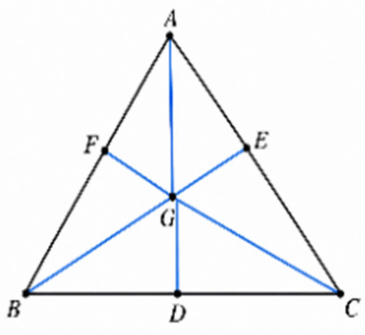
(i) 140° (ii) 100°

(iii) 40° (iv) 20°

(l) In the figure, the medians AD, BE and CF of ΔABC intersect at G. If GF = 4 cm, CG is equal to -

(i) 4cm (ii) 6cm

(iii) 8cm (iv) 10cm



(m) The base and height of a triangle are 4cm and 5cm respectively. The area of a triangle is

(i) $4cm^2$ (ii) $5cm^2$

(iii) $10cm^2$ (iv) $12cm^2$

(n) Signs of the abscissa and ordinate of a point in the second quadrant are

(i) + , + (ii) - , -

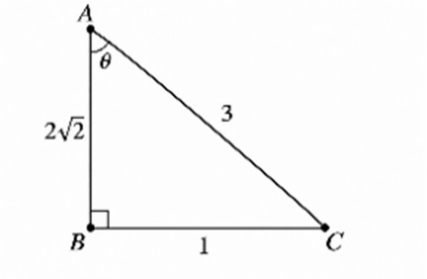
(iii) - , + (iv) + , -

(o) The perpendicular distance of the point P(-3, 4) from the x-axis is –

(i) 4 units (ii) 3 units

(iii) 5 units (iv) √3 units

(p) From the given figure, the value of sin θ is–



(i) $\frac{1}{3}$ (ii) $\frac{1}{2\sqrt{2}}$

(iii) $\frac{3}{2\sqrt{2}}$ (iv) 3

(q) $\sin^2\theta + \cos^2\theta$ is equal to –

(i) 0 (ii) 1

(iii) 2 (iv) 3

(r) cosec 30° + cot 45° =

(i) 1 (ii) 2

(iii) 3 (iv) 4

(s) If 'r' and 'h' are the radius and height of the cylinder, then the volume is

(i) $\frac{1}{3}\pi r^2 h$ (ii) πr^2h

(iii) $\frac{2}{3}\pi r^3$ (iv) 2πrh

(t) Three cubes each of side 5cm are joined end to end. The length of the resulting cuboid is

(i) 5cm (ii) 10cm

(iii) 15cm (iv) 25cm

(u) An ice cream cone is of radius 3 cm and height 4cm. Slant height for the chocolate coating is-

(i) 3cm (ii) 4cm

(iii) 5cm (iv) 7cm

(v) The mode of the numbers 7, 1, 2, 4, 2, 7, 6, 8, 7, 5, 9 is -

(i) 8 (ii) 7

(iii) 6 (iv) 5

(w) Which of the following cannot be the probability of an event?

(i) $\frac{5}{3}$ (ii) $\frac{3}{5}$

(iii) 1 (iv) 0

(x) A die is thrown 100 times and the outcomes were recorded as follows:

Outcome	1	2	3	4	5	6
Frequency	5	15	20	30	10	20

The probability of getting a 5 is:

(i) $\frac{3}{20}$ (ii) $\frac{4}{25}$

(iii) $\frac{1}{10}$ (iv) $\frac{7}{25}$

2. Answer the following $10 \times 2 = 20$

(a) Write down the power sets of A = {1, 2, 3}

(b) If a:b = 7:5 and b:c = 9:11. Find:

(i) a:c (ii) a:b:c

(c) The cost of 5 litres of petrol is ₹ 530, find the cost of 14 litres of petrol.

(d) By Remainder theorem, find the remainder when p(x) is divided by g(x) where p(x) = $2x^3 + x^2 - 2x - 1$; g (x) = x-1.

(e) Two congruent circles have centres O and O′. Arc AXB subtends an angle of 75° at the centre O and arc A′X B′ subtends an angle of 25° at the centre O′. Find the ratio of AXB and A′X B′

(f) In which quadrant or on which coordinate axis do the following points (-2, -5), (4, 7), (-6, 0) and (0, 5) lie?

(g) A pole stands vertically on the ground. From a point on the ground which is $15\sqrt{3}$ m away from the foot of the pole, the angle of elevation of the top of the pole is found to be 30°. Find the height of the pole.

(h) Prove that: $(1 - \tan\theta)^2 + (1 + \tan\theta)^2 = 2\sec^2\theta$.

(i) Find the radius of a sphere whose surface area is 1386cm². $(\pi = \frac{22}{7})$

(j) Mean of 20 observations was found to be 15. But later on, it was discovered that 25 had be wrongly read as 15 at one place. Find the correct mean.

3. If a and b are rational numbers, find the values of a and b: $\frac{\sqrt{3}+1}{\sqrt{3}-1} = a + b\sqrt{3}$. 3

4. Calculate the amount and compound interest on ₹ 3,200 for 2 years at 5% per annum compounded annually. 3

5. Find the HCF and LCM of : $(x^2 - 9)$ and $(2x^2 - 5x - 3)$. 3

6. (a) The sum of two numbers is 70. If the difference between three times the larger number and twice the smaller number is 90, find the numbers. 3

OR

(b) A shopkeeper sold pens for ₹ 3 each and pencils for ₹ 5 each. If Rina bought a total of 14 items and spent ₹ 60 for the items, how many pens and pencils did Rina purchase? 3

7. (a) Construct a triangle PQR in which QR = 6 cm, $\angle Q = 60°$ and PR - PQ = 2 cm (Steps of construction not required) 3

OR

(b) Construct a triangle PQR given that PQ = 5 cm, QR = 8 cm and median PM = 4 cm (Steps of construction not required) 3

8. If $\tan A = \frac{4}{3}$, find the values of all T-ratios of the angle A. 3

9. The mean of the following distribution is 22. 3

x	5	15	25	35	45
F	12	16	p	7	9

Find the value of p.

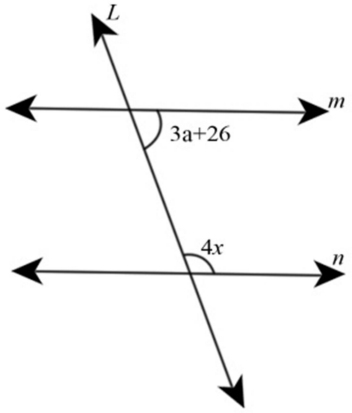
10. Draw the graph of the linear equation 2x + y = 6, plotting at least three points. Also find the coordinates of the point where the graph cuts the y- axis. 5

11. (a) Find the area of an iron sheet required to make a closed rectangular cistern whose length is 8m, breadth 6m and depth 2.5m. Also find its capacity in litres. *(1m^3 = 1000 l)* 5

OR

(b) The sides of a triangular plot are in the ratio 9:10:17 and its perimeter is 72m. Find its area. Also find the length of the altitude corresponding to the smallest side. 5

12. If a transversal intersects two parallel lines, then each pair of consecutive interior angles are supplementary. In the given figure, for what value of x will the lines m and n be parallel to each other? 5



CQ/27/SAMPLE

CLASS-IX
SCIENCE
(Theory)
Full Marks – 70

SECTION - A (PHYSICS) 24 marks

1. Choose the correct answer from the given options : $4 \times 1 = 4$

   (a) A force acting on a body of mass 4 kg producing an acceleration of 0.5 m/s^2 is
   (i) 4 N (ii) 20 N
   (iii) 2 N (iv) 0.5 N

   (b) The force of gravitation between two bodies does not depend on –
   (i) the product of their masses. (ii) the distance between their centres.
   (iii) acceleration due to gravity. (iv) none of these

   (c) Work done by the moon in rotating about the earth is –
   (i) Zero (ii) $\frac{1}{6}$ times that of the earth
   (iii) Infinity (iv) Double that of the earth

   (d) Sound travels from air into water. Which one of the following remains unchanged?
   (i) amplitude (ii) frequency
   (iii) speed (iv) all of these

2. Draw a *v-t* graph to represent uniform retardation. 1

3. The weight of a body at the centre of the earth is zero. Justify. 1

4. How will you reduce undesirable effects due to reverberation in a hall? 1

5. Two men, A and B, of equal weight climb stairs of the same height. Man A takes 10 seconds, while Man B takes 20 seconds.. Who does more work? Why? 2

6. A body of mass 10 kg slows down from a velocity of 5m/s to 0. Find the change in the kinetic energy of the body. What does the negative sign indicate? 1 ½ + ½ = 2

7. Write the three equations of uniformly accelerated motion and explain the meaning of each symbol used in the equation. 3

8. (a) State Newton's Second Law of motion. Deduce Newton's First Law from the Second Law. 1 + 2 = 3

OR

(b) How can you identify whether the forces acting on a body are balanced? Explain any three characteristics. 3

9. A body of mass 2 kg and density 8000 kg/m^3 is completely dipped in a liquid of density 800 kg/m^3. Find the force of buoyancy on it. 3

10. (a) Describe a simple experiment to show that sound is produced by a vibrating object. 4

OR

(b) Explain how sound travels through the human ear with a neat labelled diagram. 4

SECTION - B (CHEMISTRY) 23 marks

11. Choose the correct answer. 4 × 1 = 4

(a) In which of the following physical states are the particle well arranged?

(i) Solid crystals (ii) Liquid
(iii) Gas (iv) Amorphous solid

(b) Which of these do not represent 1 mole?

(i) 12 g of carbon. (ii) 32 g of Oxygen gas.
(iii) 32 g of Carbon dioxide. (iv) 28 g of Nitrogen gas.

(c) Based on the given set of atoms, identify the correct statement:

A. ${}^{19}_{19}X$ and ${}^{20}_{19}X$

B. ${}^{21}_{19}X$ and ${}^{19}_{20}X$

(i) A and B are isotopes (ii) A and B are isobars
(iii) A only are isotopes (iv) B only are isobars

(d) The mass percentage of salt in mixing 40 g of water and 10 g of salt is –

(i) 10% (ii) 20%
(iii) 40% (iv) 50%

12. Which one will show Tyndall effect – a solution of salt or soap? 1

13. Answer the following questions. $4 \times 2 = 8$

(a) Convert:

(i) 27°C to Kelvin scale.

(ii) 746 K to Celcius scale.

(b) Is air a compound or a mixture? Justify your answer.

(c) Suggest two methods to decrease the kinetic energy of a gas.

(d) Using valency method, form the chemical formula of:

(i) Calcium chloride.

(ii) Aluminium oxide.

14. What is a solution? Define the two components of a solution. $1 + 2 = 3$

15. (a) In an experiment, it was found that on electrolysis, 90g of water produced 10g of hydrogen and 80g of oxygen. Calculate:

(i) mass ratio of hydrogen and oxygen in water.

(ii) ratio of hydrogen and oxygen atom in water.

Given that the relative atomic masses of H-atom and O-atom are 1 and 16 respectively. 3

OR

(b) Compute the mass of 6.022×10^{24} molecules of HNO_3. 3

16. (a) Describe Rutherford's experiment of alpha-particles scattering with a suitable diagram. $3 + 1 = 4$

OR

(b) Explain the main features of Bohr's theory of atom. 4

SECTION - C (BIOLOGY) 23 marks

17. Choose the correct answer: $6 \times 1 = 6$

(a) Ferns belong to which of the following group?

(i) Thallophyta (ii) Bryophyta

(iii) Pteridophyta (iv) Gymnospermae

(b) The average amount of CO_2 in atmosphere is –

(i) 0.3% (ii) 0.003%

(iii) 3.0% (iv) 0.03%

(c) Assertion (A) : Growing alternating rows of groundnut and sunflower in the same field is an example of intercropping.
Reason (R) : Inter-cropping involves growing two or more crops simultaneously in a definite row pattern to maximize land use and resource utilization.
Which of the following is correct?
(i) Both A and R are true and R is the correct explanation of A.
(ii) Both A and R are true but R is not the correct explanation of A.
(iii) A is true but R is false.
(iv) A is false but R is true.

(d) The immune system of the body is weakened by which disease?
(i) AIDS (ii) TB
(iii) Whooping cough (iv) Haemophilia

(e) Which of the following conditions will give the most benefit?
(i) Farmers use high quality seeds, do not adopt irrigation or use fertilizers.
(ii) Farmers use low quality seeds, do not adopt irrigation or use fertilizers.
(iii) Farmers use ordinary seeds, adopt irrigation and use fertilizers.
(iv) Farmers use quality seeds, adopt irrigation, use fertilizers and crop protection measures.

(f) Lysosomes are also known as 'suicidal bags of the cell' because –
(i) They act like the circulatory system of the cell.
(ii) They act on their own cellular organelles to digest them.
(iii) They manufacture the food by the process of photosynthesis.
(iv) They release energy in the form of ATP.

18. Give one example each of a cold-blooded and a warm-blooded animal. ½ + ½ = 1

19. A person gets an infection. Which type of blood cells will fight the infection? 1

20. How can farmers avoid excessive use of fertilizers that are harmful to the environment? 1

21. Write two common features of cats, rats and bats. 2

22. A cell has cell wall and chloroplast. Identify the type of cell with supporting reason(s). 2

23. What is meant by immunization? Name the vaccines given for tuberculosis and tetanus. 3

24. (a) Write any three differences between xylem and phloem. 3

OR

(b) Write any three differences between a flying lizard and a bird. 3

25. (a) What are the causes of water pollution? State any two steps to control water pollution. 2 + 2 = 4

OR

(b) What is meant by Greenhouse effect? Write any three consequences of global warming. 1 + 3 = 4

CQ/27/SAMPLE

CLASS-IX
SOCIAL SCIENCE
FULL MARKS - 80

INDIA AND THE CONTEMPORARY WORLD (24 marks)

1. Choose the correct answers from the given options: 1×8=8

a) Who was the Tsar of Russia before the revolution?
   i) Lenin ii) Stalin
   iii) Karl Marx iv) Nicholas II

b) The vertical movement between summer pastures in the high mountains and winter pastures in the low hills called-
   i) Desert pastoralism ii) Alpine pastoralism
   iii) Upland pastoralism iv) Nomadism

c) Who was the first Inspector General of Forests in India appointed in 1864?
   i) Dietrich Brandis ii) B.B. Osmaston
   iii) H.C. Hart iv) E.P Stebbing

d) Who formulated the first organised demand for women's suffrage in the United States?
   i) Amelia Jenks ii) Elizabeth Cady Stanton
   iii) Lucy Stone iv) Jnanadanandini Devi

e) A colonial government imposes a tax on every animal owned by pastoralists. What would be the most likely effect on their livelihood?
   i) Their income would necessarily increase
   ii) The financial burden of maintaining livestock would increase
   iii) Their need for grazing land would disappear
   iv) Their seasonal migration would become unnecessary

f) By the 1820's, the East India Company was losing its opium revenue to-
   i) Chinese investors
   ii) The USA
   iii) Princely states in Central India and Rajasthan
   iv) Pakistan cultivators

g) Consider the following statements, and choose the correct option:
   Assertion (A): Nomadic pastoralists follow a seasonal migratory pattern.
   Reason (R): Seasonal migration enables pastoral communities to make use of different pastures and sustain livelihood for themselves and the herd animals.
   i) Both A and R are true, and R is the correct explanation of A.
   ii) Both A and R are true, but R is not the correct explanation of A.
   iii) A is true, but R is false.
   iv) A is false, but R is true.

h) Which of the following garments was considered most suitable for Indian men in Rabindranath Tagore's proposed national dress?
(i) Achkan – A traditional long coat worn as formal attire.
(ii) Dhoti – A traditional garment commonly worn by Hindu men.
(iii) Pajama – A loose garment considered comfortable for the Indian climate.
(iv) Chapkan – A garment combining elements of Hindu and Muslim styles.

2. What were Lenin's *three* promises to the Russian people? 2

3. What is meant by the pastoral way of life? 2

4. What is scientific forestry? 2

5. Explain the major features of the ideology of Nazism. 3

6. "The opium trade benefited the British but created difficulties for Indian peasants." Explain the statement. 3

7. a) Discuss why the French Revolution broke out in 1789. 4

OR

b) What was the legacy of French Revolution? 4

INDIA - LAND AND THE PEOPLE (27 marks)

8. Choose the correct answer from the given options: 1×6=6

a) Identify the country that does not share land boundary with India.
i) Nepal ii) Afghanistan
iii) Kazakhstan iv) Pakistan

b) Consider the following statements about the Great Indian Desert-
1. It is also known as Thar Desert
2. The region receives heavy rainfall throughout the year
3. Vegetation is negligible
Which of the above statement(s) is/ are correct?
i) 1 and 3 only ii) 2 and 3 only
iii) 1 and 2 only iv) All of these

c) Coastal areas in India experience a climate that is-
i) Moderate ii) Equable
iii) Maritime iv) All of these

d) Sex ratio is –
i) The number of females per 1000 males.
ii) The number of females per 10000 males.
iii) The number of females per 5000 males.
iv) The number of males per 5000 females.

e) Cinchona and rubber belong to-

i) Tropical rainforest ii) Tropical deciduous forest
iii) Thorn and Scrub forest iv) Mangrove forest

f) In which state of India is the Gir forest located?

i) Madhya Pradesh ii) Gujarat
iii) Maharashtra iv) Assam

9. *Answer the following questions in brief:* 1×3=3

a) Name the largest and smallest states of India in terms of geographical area.
b) Mention two broad divisions of the drainage system in India.
c) A forest area receives heavy rainfall and remains green throughout the year. Which type of natural vegetation would you expect there?

10. Why is life difficult for people living in the Indian Desert? Give *two* reasons to support your answer. 2

11. What are oxbow lakes? 2

12. What is meant by density of population? 2

13. a) What is meant by October heat? 3

OR

b) What are the factors that determine India's climate? 3

14. *Give reasons for the following:* 2+2=4

i) The sun rises *two* hours later in Gujarat than Arunachal Pradesh
ii) The North-South extent of India is more than the East-West extent.

15. Draw an outline map of India and label the following: $2+^{1/2}+^{1/2}+^{1/2}+^{1/2}+^{1/2}+^{1/2}=5$

a) Tropic of Cancer
b) River Ganga
c) Indira Point
d) Kanyakumari
e) Kaziringa National Park
f) State with the highest population density

DEMOCRATIC POLITICS (12 marks)

16. Choose the correct answer from the given options: 1×3=3

a) The chairman of the Drafting committee was-

i) Motilal Nehru ii) B.R. Ambedkar
iii) Jawaharlal Nehru iv) Mahatma Gandhi

b) The number of parliamentary constituencies in Mizoram is-

i) 1 ii) 2

iii) 3 iv) 4

c) What does Universal Adult Franchise mean?

i) All adult men and women can vote

ii) Only educated people can vote

iii) All tax-paying citizens are to cast a vote

iv) All citizens who are 18 years and above have the right to vote.

17. Name the different forms of democracy. 2

18. How are PILs beneficial to common people? 3

19. a) What are the *three* organs of the Government? How do they function? 4

OR

b) Enlist the functions of the Prime Minister of India. 4

UNDERSTANDING ECONOMIC DEVELOPMENT (12 marks)

20. Choose the correct answer from the given options: 1×3=3

a) Which of the following is not a factor of production?

i) Land ii) Capital

iii) Labour iv) Sofa set used in a private home

b) Which *one* of the following is a non-economic activity?

i) A nurse working in a hospital ii) A mother looking after her baby

iii) A worker working in a factory iv) None of these

c) Suppose you download and use a free game on your phone. Which statement best explains your role in the economy?

i) You are not part of the economy because you did not pay for the game.

ii) You are part of the economy because your use of the game may generate revenue through advertisements or data-related services.

iii) You are part of the economy only when you purchase a paid game.

iv) You are not part of the economy because digital games are not economic activities.

21. Write a short note on the public distribution system. 2

22. State *two* examples of unpaid household activities. Why are such activities generally not included in the calculation of national income? 3

23. a) Evaluate *four* factors responsible for poverty in India. 4

OR

b) Assess the efficacy of poverty alleviation programmes in the country. 4

DISASTER MANAGEMENT (5 marks)

24. An earthquake occurs while students are attending classes in a multi-storeyed school building. What should they do immediately while the ground is shaking? 1
    i) Run towards the staircase during the shaking
    ii) Stand near the door and window frames
    iii) Drop, cover and hold on under sturdy furniture
    iv) Rush towards any emergency exit

25. What is the difference between prevention and mitigation? 2

26. Mention the major causes of road accidents. 2