# PRE-BOARD EXAMINATION, (2025 - 2026)

# CLASS-X

# ENGLISH LANGUAGE AND LITERATURE (Code 184)

**Max. Time-3Hours** **MAX. Marks 80.**

## General Instructions:

Read the instructions very carefully and strictly follow them:

1. This question paper comprises 11 questions. All questions are compulsory

2. The question paper contains THREE sections

   Section – A: Reading Skills

   Section – B: Grammar and Creative Writing Skills

   Section – C: Literature Textbook

3. Attempt questions based on specific instructions for each Part.

## SECTION- A

## READING SKILLS (20 Marks)

### 1- Read the following passage and then answer the following questions. (10)

(1) Listening is the ability to accurately receive and interpret messages in the communication process. One of the greatest gifts any of us can ever receive is the gift of listening. It is also one of the greatest gifts we can ever give.

Unfortunately, it appears to be a lost art. We live in a world where everyone is talking but few are listening. What often passes for listening is simply one person pausing to collect their thoughts for their next soliloquy.

(2) Hearing refers to the sounds that you hear, whereas listening requires more than that: it requires focus. Listening means paying attention not only to the story, but how it is told, the use of language and voice, and how the other person uses his or her body. In other words, it means being aware of both verbal and non-verbal messages. Your ability to listen effectively depends on the degree to which you perceive and understand these messages.

(3) Listening is a difficult task. Like every skill, the more you do it, the better you get. Listening can be developed through practice, or lost if not used regularly. Good listeners focus on what they are hearing. They pause to think about what they've heard before responding. They ask questions because they want to know the answers, not just to keep the conversation going.

(4) So often, we are distracted with other things. We try to listen while continuing to work on the computer or watch television. To be fully present means we eliminate these distractions and focus exclusively on the other person. It takes great effort to be fully present in the moment, leaning forward, with your ears and heart open. Words are only part of the communication. Sometimes we need to experience the other person's feelings to really understand. We need to listen with our heart as well as our mind. We must repeat back what the other person has said. When we do this-and do it accurately-we communicate what we understand. It also gives us an opportunity to recalibrate our understanding if we have misunderstood something. Plenty of people are good talkers. Few are good listeners. If you develop the latter skill, you will find yourself invited into amazing conversations that wouldn’t otherwise happen.

## Answer the following questions, based on the passage.

**i**. Based on your understanding of the passage, why has the author described listening as "lost art"? Answer in about 40 words. (2)

**ii.** Complete the sentence appropriately.

The author is disappointed that pausing to collect their thoughts is often considered as …… (1)

**iii.** What does the author imply by saying we should listen with both "heart and mind"? (2)

**iv**. "Listening is not just hearing words. Good listeners focus on what they are hearing and try to perceive the feelings behind the words. They do not overlook the emotions of the speaker. True listening helps us understand others and is one of the greatest gifts we can give."

From the words used in the passage, identify the pair that are opposite in meaning:

1. Perceive – Overlook
2. Focus – Ignore
3. Understand – Misinterpret
4. Listening – Speaking

A. 1 and 2, B. 3 and 4, C. 2 and 4, D. 1 and 4

**v**. Complete the sentence appropriately.

Our ability to listen effectively depends on the ……. (1)

**vi**. "To be fully present" in a conversation means. (1)

A. Sitting silently

B. Avoiding distractions and focusing

C. Taking notes constantly

D. Agreeing with the speaker

**vii.** To repeat back what the other person has said gives us (1)

A. an opportunity to argue against the speaker's point
B. a method to dominate the conversation
C. a way to shift attention from the discussion
D. an opportunity to correct our understanding if we got it wrong

**viii**. In the statement *"Good listeners focus on what they are hearing"*, the language is primarily: (1)
A. Figurative
B. Direct and literal
C. Persuasive
D. Poetic

## 2 Read the following report: (10)

**10 ABC School Launches Innovative AI Club to Foster Interest in Artificial Intelligence (by Samira Rao, Secretary, AI Club Ahmedabad)**

Nov. 20 – ABC School proudly announces the establishment of its first AI Club, designed to spark interest and engagement in the field of artificial intelligence among students. The club was officially

launched during the school's technology fair on October 18, attracting a diverse group of students eager to learn about AI and its applications.

The event was inaugurated by Ms. Anita Sharma, the school's head of the computer science department, and Raj Mehta, the club's president, who shared their excitement about the potential of AI in shaping the future. They emphasised the importance of understanding AI technologies and their ethical implications in today's rapidly evolving digital landscape. The club aims to provide students with practical experiences through workshops, projects, and discussions with industry professionals. During the fair, club members showcased a series of interactive demonstrations, including AI-powered catboats and simple machine learning models. Attendees were encouraged to participate in coding challenges and explore various AI applications, such as image recognition and natural language processing. The enthusiasm and creativity displayed by the students highlighted their eagerness to dive deeper into this fascinating field. The AI Club has planned a variety of upcoming activities, including coding workshops, guest lectures from AI experts, and collaborative projects with local tech companies. They are also organising a hackathon, where students will have the opportunity to develop their own AI-driven solutions to real-world problems. The AI Club aims to equip students with essential skills and knowledge while fostering a collaborative and innovative learning environment. Created for academic usage /249

## Answer the following questions, based on the report above:

**I.** Complete with a suitable reason:

The AI Club was motivated to plan various upcoming activities because _____. (1)

**II**. The AI Club intends to deepen students' understanding of artificial intelligence by offering _____, real-world projects, and collaborative sessions with experts in the field. (1)

**III.** What was the primary goal of the AI Club when it was launched? (1)

A) To organize coding competitions for students

B) To teach students about AI and its ethical use

C) To focus on robotics and hardware development

D) To prepare students for annual technology fairs

**IV**. Who did the AI Club collaborate with to provide students hands-on experiences and expert guidance? (1)

1. Faculty members
2. Local business leaders
3. Industry professionals
4. Computer science department head
5. AI researchers

Select the correct option:

A. Only 2

B. Only 5

C. 3 and 4

D. 1 and 5

**V**. What was the most likely purpose of the interactive demonstrations showcased during the technology fair? (1)

**VI**. What does the passage suggest about the students' interest in artificial intelligence? (1)

**VII.** What specific skills are the students expected to develop through their participation in the AI Club? (2)

**VIII**. Explain how the AI club at ABC School aligns with the school's goals of promoting holistic education. (2)

## SECTION – B

## GRAMMAR AND CREATIVE WRITING SKILLS (20 MARKS)

### GRAMMAR (10M)

**3. Complete ANY TEN of twelve of the following tasks, as directed. (1×10)**

**i. Fill in the blank by choosing the correct option to complete the given sentence. (1)**

The Indian Constitution guarantees the Right to Equality, which means that …… (each/any/few/many) citizen is equal before the law and cannot be discriminated against on grounds of religion, race, caste, gender, or place of birth.

**ii.** Choose the correct option to complete the dialogue. (1)

Ravi: Hi Meera, have you finished your homework?

Meera: Yes, " ……

Ravi: Wonderful! Then let's revise together.

A. I haven't started yet

B. I have already completed it

C. I don't want to do it

D. I will do it later

**iii**. Complete the following sentence. (1)

He has practiced speaking English every day, and now he ……. to participate in the school debate competition.

A. had decide

B. decides

C. is preparing

D. was decided

**iv.** Change the given dialogue into indirect speech. (1)

Priya: Will you join the football team this year?

Arun: Yes, I will.

Priya asked Arun if ……. the football team that year.

**v**. Fill in the blank by choosing the correct option. (1)

If you want to stay healthy, you ……. eat a balanced diet.

A. may B. should C. could D. would

**vi**. Select the option that identifies the error and supplies the correction for the closing line, from a formal report. (1)

Therefore, the survey indicate that most students prefer group study over self-study.

Option

A. no error
B. correction

a. indicate indicates

b. most mostly

c. over for

d. therefore However

**vii.** Rahul: "Where are you going tomorrow, Neha?" (1)

Neha: "I am leaving for Delhi to attend my cousin's wedding."

Question:

Rahul asked Neha _____.

A. where was she going the next day?

B. where she was going the next day.

C. where she is going the following day.

D. where had she gone the next day.

**viii.** Fill in the blank by choosing the correct option to complete the sentence to update the result of the regional science fair: (1)
We have exciting news to share! Our school _____ the first place in the regional science fair.

(A) awarded (B) was awarded (C) had awarded (D) will be awarded

**ix.** Complete the line from a song by filling in the blank with the correct option: (1)
The morning dew captures your essence,
The flowers and grass _____ your colour,
The Sunrise embraces your arrival,
As the dawn welcomes a new day.

(A) reflect (B) reflects (C) reflected (D) shall reflect

**x.** Identify the error and supply correction for the given sentence: (1)

The public health campaign aimed in increase awareness of the risks associated with underage drinking.

**xi**. Fill in the blank by choosing the correct option to complete the update on the school's chess team.

(1)

It's a victorious day!

Our school's chess team _____ the interschool chess championship.

(A) has been won (B) will winning (C) was winning (D) has won

**xii.** Complete the line from a song by filling in the blank with the correct option. (1)

The whispering leaves tell your tale,

The silent stones _____ your journey,

The sun casts light on your path,

Leading you towards tomorrow's glory.

(A) have echoed (B) echo (C) echoes (D) shall echo

## CREATIVE WRITING SKILLS (10M)

**4 (A)** As Nalini Sharda of 409, Surya Apartments, Gopalpur, you believe that pedestrian safety is very important. Footpaths on both sides of the main roads of your city need major repairs and on some stretches they need to be constructed.

Write a letter to the MLA of your city area, in about 120 words, stressing the need for footpaths for pedestrian safety. Share your concern for maintenance of existing footpaths and the need to construct new ones where they are required. (1 × 5 = 5)

**OR**

**4(B)** As Sohail Khan, the sports captain of Pinnacle Public School, you believe that fitness as a lifestyle should be promoted. Write a letter to the Editor of a national daily, in about 120 words, suggesting the introduction of "Cycle to School" campaign for school going students. The programme aims to develop the habit of exercising through cycling to maintain fitness and keeping children active. Share the importance and credibility of such a programme and suggest a feasible way to execute it along with possible activities.(1×5=5)

**5 (A)** An area is believed to be water stressed when annual water supplies drop below 1700 cubic metres per person per year. As per an analysis, we are already surviving with around 1700-1800 cubic metres per person per year. As our demand for water has increased drastically over the years, per capita water availability has taken a beating. Based on the given table, write an analytical paragraph, in about 120 words, analysing the possible causes of water scarcity in the future. (5M)

TABLE ON WATER AVAILABILITY

| Year | Population (Million) | Per capita water (Availability M3/year) |
|---|---|---|
| 1951 | 361 | 5177 |
| 1955 | 395 | 4732 |
| 1991 | 846 | 2209 |
| 2001 | 1027 | 1820 |
| 2025 | 1394 | 1341 |
| 2050 | 1640 | 1140 |

**OR**

**5**(B) Read the given details of a playground intended for your resident area. (5M)

- A central climbing structure inspired by traditional Indian architecture, such as a miniature fort, with multiple levels and slides.
- Swings adorned with colorful Indian patterns, along with monkey bars and a zip line.
- A water play feature inspired by Indian fountains or rivers
- Shaded seating areas with benches and swings, resembling traditional chaupals or gazebos.
- Trees, shrubs, and flower beds • Ample open space

Analyse the details and write an analytical paragraph in about 120 words about the suitability of this playground. Focus on factors such as safety, inclusivity, fun features, suitability for different age groups, and overall experience.

## SECTION-C

## LITERATURE TEXT BOOKS (40 Marks)

### 6. Read the following extracts and answer the questions for ANY ONE of the given two. 5

(A) On the day of the inauguration, I was overwhelmed with a sense of history. In the first decade of the 20th century a few years after the bitter Anglo-Boer war and before my own birth, the white skinned people of South Africa patched up their differences and created a system of racial domination against the dark-skinned people of their own land. The structure they created formed the basis of one of the harshest, most inhumane societies the world has ever known. Now, in the last decade of the twentieth century, and my own eighth decade as a man, that system has been overturned forever and replaced by one that recognised the rights and freedoms of all peoples, regardless of the colour of their skin.

**(i)** What did the narrator feel when he said, *"I was overwhelmed with a sense of history"*? Explain in your own words. (1)

**(ii)** The system of racial domination created by white-skinned people in South Africa has now been replaced by a system that: (1)

A) Recognises the rights and freedoms of all people.

B) Focuses mainly on the education of the Black population.

C) Reminds people of past bitter experiences.

D) Prioritises the personal growth of individuals.

**(iii)** Comment on the kind of society apartheid had created? (2)

**(iv)** In the extract, the phrase *"patched up their differences"* can be best replaced by: (1)

A) Resolved their disagreements B) Ignored their differences
C) Complicated their conflicts D) Postponed their issues

**OR**

**6(B)** I started right away at the Montessori Nursery School. I stayed there until I was six, at which time I started in the first form. In the sixth form, my teacher was Mrs. Kuperus, the headmistress. At the end of the year we were both in tears as we said a heart-breaking farewell. In the summer of 1941, Grandma fell ill and had to have an operation, so my birthday passed with little celebration.

**(i)** "In the summer of 1941, Grandma fell ill and had to have an operation, so my birthday passed with little celebration." What can you infer about Anne from this sentence? Write any one point. (1)

**(ii)** In the passage, Anne and Mrs. Kuperus were "both in tears." This shows that their relationship was: **(1)**

A) Formal and distant B) Friendly but not close
C) Warm and affectionate D) Strict and disciplinary

**(iii)** Why was Anne so emotional when saying goodbye to Mrs. Kuperus at the end of the year? Explain in 2–3 sentences? (2)

**iv)** Substitute the word 'heart-breaking' with a word similar in meaning in the following sentence. (1)

"At the end of the year we were both in tears as we said a heart-breaking farewell."

## 7. Read the following extracts and answer the questions for ANY ONE of the given two: 5

**(a**) In a world of possessions. People will take

Balls, balls will be lost always, little boy.

And no one buys a ball back. Money is external.

He is learning, well behind his desperate eyes,

The epistemology of loss, how to stand up

Knowing what every man must one day know

And most know many days, how to stand up.

(The Ball Poem)

**(i)** Fill in the blank with one word.

When the speaker says "People will take balls, Balls will be lost always, little boy", his tone is.....(1)

**(ii)** The poet says that money is external. What inference can be drawn from this statement? Answer in about 40 words. (2)

**(iii)** Which of the following best describes the speaker's attitude towards material possessions? (1)

(A) Indifferent (B) emotional (C) Casual (D) respectful

**(iv)** Identify the poetic device used in "And no one buys a ball back". (1)

**OR**

**(b)** Don't eat that chocolate, Amanda!

Remember your acne, Amanda!

Will you please look at me when I'm speaking to you, Amanda!

(I am Rapunzel, I have not a care;

life in a tower is tranquil and rare;

I'll certainly never let down my bright hair!)

**(i)** What is the central idea of the poem as reflected in the lines above? Answer in about 40 words.(2)

**(ii)** Complete the sentence with the appropriate option. (1)

"Will you please look at me when I'm speaking to you, Amanda!" tells us that the mother's attitude is

(A) Loving (B) relaxed (C) Authoritative (D) thoughtful

**(iii)** Identify any one poetic device used in the above extract. (1)

**(iv)** For what reason does Amanda imagine herself to be Rapunzel? (1)

## 8. Answer ANY FOUR of the following five questions in 40-50 words each: (4×3=12)

A). What conditions made crossing the storm clouds difficult? "The Black Aeroplane**"**.

b). How did the Buddha respond to Kisa Gotami's request? What can be inferred about his method of teaching from the same? "The Sermon at Benares"

c). "The Lomovs and the Chubukovs have always had the most friendly, and I might almost say the most affectionate, regard for each other." How would you evaluate Lomov and Chubukov's relationship as neighbours? "The Proposal"

d). 'The field was white, as if covered with salt.' This is how the field is described after the hailstorm. The pelting hailstones could have been easily seen as sugar cubes. Do you think comparing it with sugar would have been more appropriate? Why/Why not? *"A Letter to God"*.

e).When would the baker come every day? Why did the children run to meet him? "Glimpses of India"

## 9. Answer ANY TWO of the following three questions in 40 50 words each: (2×3=6)

a). According to a popular quote - "Where there is no struggle, there is no strength". In what way is this quote relevant to the events of the story "A Triumph of Surgery?"

b). How does education play a transformative role in Bholi's life?.

c). "Stereotypes are often misleading". Elaborate on the given quote in the context of "The Midnight Visitor".

## 10. Answer ANY ONE of the following two questions in 100-120 words. (6)

(a) Grief or sadness is an emotion natural to all types of loss or significant change. You have been asked to present an analysis of the approaches of Lencho and Kisa Gotami in dealing with their respective losses. Write this presentation draft including your insights, and comparing the approaches of both.

You may begin like this One acknowledges that Lencho had unwavering faith in God whereas Kisa Gotami in her grief, believed that her son .....however.....

(Reference - A Letter to God and The Sermon at Benares)

**OR**

(b) You have been chosen to address the school assembly on the occasion of Women's Day. You choose to speak on the resilience and indomitable spirit of the young girls: Anne Frank and Valli. Prepare the speech draft, with reference to the commonality and contrast in the situations and circumstances of both the girls.

(Madam Rides the Bus and From the Diary of Anne Frank)

You may begin like this: Good morning everyone. Today, I'd like to express my insights on the resilience of two young girls. You may end this way: To conclude I'd like to say that.....

Thank you.

## 11. Answer ANY ONE of the following two questions in 100-120 words: (6)

(i) How did the lady in red manage to outsmart and out manoeuvre the other thief, Horace Danby, by robbing the safe without leaving a single fingerprint? (A Question of Trust)

**OR**

(ii) Hari Singh says "He knew it but neither his lips nor his eyes showed anything."

Anil successfully addressed the situation by not addressing it at all. Elaborate based on your reading of The Thief's Story.

**सेट : 1**

पूर्व परिषदीय परीक्षा (2025-26)

हिन्दी (पाठ्यक्रम-अ) विषय कोड-002

कक्षा : दसवीं

विषय-हिंदी

निर्धारित समय : 3 घंटे अधिकतम अंक : **80**

सामान्य निर्देश :

निम्नलिखित निर्देशों को बहुत सावधानी से पढ़िए और उनका अनुपालन कीजिए :

(i) इस प्रश्नपत्र में कुल चार खंड हैं- क, ख ग, घ।

(ii) इस प्रश्नपत्र में कुल 15 प्रश्न हैं, सभी प्रश्न अनिवार्य है।

(iii) प्रश्नपत्र में आंतरिक विकल्प दिए गए हैं।

(iv) सभी प्रश्नों के उत्तर दिए गए निर्देशों का पालन करते हुए लिखें ।

| प्रश्न संख्या | खंड –क<br>(अपठित बोध) | अंक (14) |
|---|---|---|
| 1 | निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर उस पर आधारित पूछे गए प्रश्नों के उत्तर लिखिए :<br><br>हरव्यक्तिचाहताहैकिउसेजीवनमेंकभीनिराशानामिले,वहहमेशासफलताप्राप्तकरेंऔरहरजगहउसेसम्मानऔरलोकप्रियता मिले,लेकिनयहइतनाआसाननहींहै।येसुखपानेकेलिएव्यक्तिकोकईप्रकारकेजतनकरनेपड़तेहैं।जैसाकिसभीजानतेहैंकिहर सफलताकेपीछेएककठिनपरिश्रमऔरसंघर्षकीकहानीछिपीहोतीहै।<br>जोव्यक्तिसामनेवालेकोप्रभावितकरसकताहैवहीसफलताकोप्राप्तकरताहै।सफलताकीनईनईसीढ़ियांचढ़तेहुएव्यक्तिलोक प्रियताकेमुक़ामकोभीपालेताहै।उसेसमाजमेंजाननेवालेलोगोंकीसंख्याबढ़तीचलीजातीहै।कौननहींचाहताहैकिउन्हेंज़्यादासे ज़्यादालोगजानें, उनकीसामाजिकपहचानबढ़े।<br>समाजमेंज़्यादासेज़्यादाउनकानामहोपरंतुइसकीलोकप्रियताकीजोक़ीमतचुकानीहोतीहै,उसकेलिएकमहीलोगतैयारहोतेहैं। आपचर्चितहैतोआपकोसामाजिकजवाबदेहीभीअधिकहोतीहै। हरअनुकूल-<br>प्रतिकूलस्थितिकेलिएआपकोबाक़ीलोगोंसेज़्यादातैयारीकरनीपड़तीहै। चर्चितहोनेकेबादख़ुदकेमुताबिक़सामान्यजीवनजीना औरभीकठिनहोताहैचर्चितलोगोंसेअनौपचारिकबातकरें,तोपाएँगेकिऐसेमेंवेजोबतारहेहैं,उससेवहअलगहै,जोउन्होंनेअनौप चारिकबातचीतकेदौरानकहीथी।<br>चर्चितव्यक्तियोंकीबनीछविप्रायःसच्चाईसेअलगहोतीहै। विडंबनायहहैकिवेख़ुदभीउससभीकोजीनेमेंलगजातेहैंजोगढ़ीगईहै। अलबर्टआइंस्टीनजिन्हेंलोगसुपरमानवकहतेथेजोअपनेजीवनकालमेंहीइसदुनियाकेसर्वाधिकलोकप्रियव्यक्तिथेएकबारउ न्होंनेकहाथाकि"मेरीउपलब्धियोंवमेरीक्षमताओंकेबीच,जोलोगोंद्वारासमझीगईहैऔरवास्तवमेंजोमैंहूँएकविरोधाभासहै। | 7 |

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| | "लोकप्रियताकेसामाजिक-<br>नैतिकपहलुओंपरअध्ययनकरनेवालेमनोविज्ञानीकहतेहैंकि"टिकाऊलोकप्रियतासहीमायनेमेंवहीहै,जोदिलोंपरराजकरवाए, नकिचर्चाओंमें।"चर्चामेंसरलहोनासरलहैपरइसकीप्रक्रियाजटिलहै,इसलिएलोकप्रियव्यक्तिप्रायःबदनामभीजल्दहोताहै।उसकेनकारात्मकपहलूभीजल्दसामनेआतेहैं।उनपरअहमभीजल्दहावीहोजाताहै।ऐसीलोकप्रियताअक्सरयहभ्रमदेतीहैकिआपसामान्यसेअलगहैं।<br>यहसोचअपनोंवदूसरोंसेबहुतदूरलेजातीहै।इसेसंतुलिततरीक़ेसेनलियाजाएतोज़्यादातरचर्चितव्यक्तियोंकेलिएयहदुखीकरनेवालीहोतीहैअंततःयहबातयादरखेंकिप्रसिद्धलोगोंकोगुमनामीकासम्मानकरनाऔरख़ुदकोनैतिकबनाएरखनाआनाचाहिएअन्यथावक़्तकीहवाकेबीचवेतिनकेकीतरहउड़ा दिए जाएँगे। | |
| (क) | **अधिकपरिचितलोगोंकीक्याकठिनाइयाँहोतीहैं?**<br>(i)उनकीसमाजकेप्रतिजवाबदेहीबढ़जातीहै<br>(ii) प्रत्येकस्थितिमेंअन्यलोगोंकीअपेक्षाअधिकतैयाररहनापड़ताहै<br>(iii) वेसामान्यजनताकीतरहजीवननहींजीपाते<br>(iv) उपर्युक्तसभी | 1 |
| (ख) | **हरसफलताकेपीछे ——होतीहै।**<br>(i) कठिनपरिश्रमकीकहानी<br>(ii) संघर्षकीकहानी<br>(iii) (i) और(ii) दोनों<br>(iv) स्वास्थ्यकीकहानी | 1 |
| (ग) | कथन (A) औरकथन (R) कोपढ़करउपयुक्तविकल्पका चयन कर लिखिए:<br>कथन (A) लोकप्रियव्यक्तिशीघ्रहीबदनामहोजातेहैं।<br>कथन (R) उनमें अहम्बहुतजल्दीआजाताहै।<br>(i) कथन (A) ग़लतहै, किंतुकारण (R) सहीहै।<br>(ii) कथन (A) औरकारण (R) दोनोंहीग़लतहैं<br>(iii) कथन (A) सहीहैतथाकारण (R), कथन (A) कीसहीव्याख्याहै।<br>(v) कथन (A) औरकारण (R) दोनोंसहीहैं, किंतुकारण (R) कथन (A) कीसहीव्याख्यानहींहै। | 1 |
| (घ) | गद्यांशकेअनुसारलोकप्रिय व्यक्तिके जीवन मेंक्या विडंबनाहैस्पष्ट कीजिए ? | 2 |
| (ङ) | चर्चितव्यक्तियोंकीछविकैसी होती है ? | 2 |
| 2 | निम्नलिखितकाव्यांशको ध्यानपूर्वक पढ़कर उस पर आधारित पूछे गए प्रश्नों के उत्तर लिखिए: | 7 |

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| | हेग्रामदेवता !नमस्कार !<br>सोने -चाँदीसेनहीं, किन्तुतुमनेमिट्टीसेकियाप्यार।<br>हे ग्रामदेवता !नमस्कार!<br>जनकोलाहलसेदूरकहीएकाकीसिमटा-सानिवास,<br>रवि-शशिकाउतनानहींजितनाप्राणोंकाहोताप्रकाश,<br>श्रमवैभवकेबलपरकरतेहोजड़सेचेतनकाविकास,<br>दानों-दानोंमेंफूटरहेसौ-सौदानोंकेहरेहास,<br>यहहैंनपसीनेकीधारा, यहगंगाकीहैधवलधार,<br>हेग्रामदेवता! नमस्कार!<br>अधखुलेअंगजिनमेंकेवल, हैंकसेहुएकुछअस्थि-खंड<br>जिनमेंदधीचिकीहड्डीहैयहव्रजइंद्रकाहैप्रचंड।<br>जोहैगतिशीलसभीऋतुमें,गर्मी, वर्षाहोयाकिठंड,<br>जगतकोदेतेहोपुरस्कारदेकरअपनेकोकठिनदंड।<br>झोपड़ीझुकाकरतुमअपनीऊँचीकरतेहोंराज-द्वार!<br>हेग्रामदेवता! नमस्कार! | |
| (क) | **प्रस्तुतकाव्यांशकेआधारपरबतायेंकिकविनेग्रामदेवताकिसेकहाहै?**<br>(i) गाँवकेदेवताको<br>(ii) किसानको<br>(iii) गाँवको<br>(iv) ईश्वरको | 1 |
| (ख) | **प्रस्तुतकाव्यांशनिम्नमेंसेकिससेसंबंधितनहींहै -**<br>(i) दंड-पुरस्कार से<br>(ii) गाँवकीझोपड़ियोंसे<br>(iii) किसानसे<br>(iv) उपरोक्त सभी | 1 |
| (ग) | **कथन (A) औरकथन (R) कोपढ़करउपयुक्तविकल्प का चयन कर लिखिए :**<br>कथन (A) कविनेकिसानों कोग्रामदेवताकेरूप में चित्रित किया हैं ।<br>कथन (R) वहअपनीमिट्टीसेप्रेमकरतेहैंऔरअपनेश्रमसेमिट्टीमेंअन्नउगातेहैं।<br>(i) कथन (A) सहीहै, किंतुकारण (R) ग़लतहै।<br>(ii) कथन (A) ग़लतहै, किंतुकारण (R) सहीहै।<br>(iii) कथन (A) औरकारण (R) दोनोंसहीहैं, किंतुकारण (R), कथन (A) की सहीव्याख्यानहींहै।<br>(iv) कथन (A) औरकारण (R) दोनोंहीसहीहैंतथाकारण (R), कथन (A) कीसहीव्याख्याहै | 1 |
| (घ) | ग्रामदेवताकहाँनिवासकरतेहैंऔरकविकिसानकोप्रणामक्योंकरताहै? | 2 |

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| (ङ) | प्रस्तुतकवितामेंअधखुलेअंगकिसकेबताएगए हैं और क्यों? | 2 |
| | **खंड – ख ( व्यावहारिकव्याकरण)** | **16** |
| 3 | **निर्देशानुसार 'रचनाकेआधारपरवाक्यभेद' परआधारितपाँचप्रश्नोंमेंसेकिन्हींचारप्रश्नोंकेउत्तरलिखिए:** | (4x1=4) |
| (क) | शाम हुई औरमजदूरघर कि ओर चल दिए। (सरलवाक्यबदलिए) | 1 |
| (ख) | वेबोलतेजारहेथे औरपिताजीकाचेहरागर्वसेबदलताजारहाथा।<br>(रचनाकेआधारपरवाक्यकाभेद लिखिए) | 1 |
| (ग) | घंटीबजी, छात्रपुस्तकेंलेकरकक्षासेबाहरनिकले।छात्रघरचलेगए।<br>(संयुक्त वाक्यमें बदलिए) | 1 |
| (घ) | <u>जबतुमजाओगे</u>तभीमैंजाऊँगा।रेखांकितअंशउपवाक्यकाकौनसाभेदहै? | 1 |
| (ङ) | कुछ पहाड़ी औरतें पत्थर तोड़ रही थीं (रचनाकेआधारपरवाक्यकाभेद लिखिए) | 1 |

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| 4 | **निर्देशानुसार 'वाच्य' परआधारितपाँचप्रश्नोंमेंसेकिन्हींचारप्रश्नोंकेउत्तर लिखिए:** | (4x1=4) |
| (क) | अध्यापकनेआजहमेंनयापाठपढ़ाया। (कर्मवाच्यमेंबदलिए) | 1 |
| (ख) | गर्मियों में हम खूब नहाते है। (वाच्य पहचानकर भेद बताइए) | 1 |
| (ग) | सफेदपोशसज्जन सुविधा से पालथी मारे बैठे थे (वाच्य पहचानकर भेद बताइए) | 1 |
| (घ | कर्मवाच्यमेंक्रियाकेलिंग, वचनऔरपुरुषकिसकेअनुसारहोतेहैं? | 1 |

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| ( ङ ) | मैं चुप नहीं बैठ सकता। (भाववाच्य में बदलिए) | 1 |
| 5 | **निर्देशानुसार 'पदपरिचय' परआधारितपाँचप्रश्नोंमेंसेकिन्हींचारप्रश्नोंकेरेखांकित पदों का पद-परिचयलिखिए:** | (4x1 =4) |
| ( क ) | राजेशआजदिल्लीजाएगा। | 1 |
| ( ख ) | वाह ! उपवन में सुंदर फूल खिले हैं। | 1 |
| ( ग ) | बच्चे धीरे-धीरे पढ़ रहे थे। | 1 |
| ( घ ) | वे बहुत अच्छे लोग हैं । | 1 |
| ( ङ ) | शब्दकबपदबनजाताहै? | 1 |
| 6 | **निर्देशानुसार 'अलंकार' परआधारितपाँचप्रश्नोंमेसेकिन्हींचारप्रश्नोंकी रेखांकित काव्य पंक्तियों में अलंकार पहचान कर लिखिए :** | (4x1 =4) |
| ( क ) | सिरफटगयाउसकामानोअरुणरंगकाघड़ा। | 1 |
| ( ख ) | सुनहु राम जेहि सिवधनु तोरा।<br>सहसबाहु सम सो रिपु मोरा।। | 1 |
| ( ग ) | बाणनहींपहुंचेशरीरतक, शत्रुगिरेपहलेहीभूपर। | 1 |
| ( घ ) | सागर के उर पर नाच -नाच करती हैं लहरें मधुर गान । | 1 |
| ( ङ ) | प्रीति-नदीमैंपाऊँनबोरयौ। | 1 |
| | **खंड - ग (पाठ्यपुस्तकएवंपूरकपाठ्यपुस्तक)** | **30** |

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| 7 | निम्नलिखितपठितगद्यांशपरआधारितबहुविकल्पीयप्रश्नोंकेसर्वाधिकउपयुक्तविकल्पचुनकरलिखिए:<br>एकसंस्कृतव्यक्तिकिसीनईचीजकीखोजकरताहै,<br>किंतुउसकीसंतानकोवहअपनेपूर्वजोंसेअनायासहीप्राप्तहोजातीहै।जिसव्यक्तिकीबुद्धिनेअथवाउसकेविवेकनेकिसी भीनएतथ्यकादर्शनकिया, वहव्यक्तिहीवास्तविकसंस्कृतव्यक्तिहैऔरउसकीसंतान, जिसेअपनेपूर्वजसेवहवस्तुअनायासहीप्राप्तहोगईहै, वहअपनेपूर्वजकीभाँतिसभ्यभलेहीबनजाए, संस्कृतनहींकहलासकता।<br><br>एकआधुनिकउदाहरणलें।न्यूटननेगुरुत्वाकर्षणकेसिद्धान्तकाआविष्कारकिया।वहसंस्कृतमानवथा।आजकेयुगका भौतिकविज्ञानकाविद्यार्थीन्यूटनकेगुरुत्वाकर्षणसेतोपरिचितहैही,<br>लेकिनउसकेसाथउसेऔरभीअनेकबातोंकाज्ञानप्राप्तहै,<br>जिनसेशायदन्यूटनअपरिचितहीरहा।ऐसाहोनेपरहमआजकेभौतिकविज्ञानकेविद्यार्थीकोन्यूटनकीअपेक्षाअधिकसभ्य भलेहीकहसके, परंतुन्यूटनजितनासंस्कृतनहींकहसकते। | (5x1 =5) |

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| (क) | **संस्कृतव्यक्तिकीउपलब्धिक्याहै?**<br>(i) अनायासहीवस्तुप्राप्तहोजाना<br>(ii) पूर्वजोंद्वाराअपरिचितहोना<br>(iii) अपनेविवेकसेनईचीजकीखोजकरना<br>(iv) उपर्युक्त सभी | 1 |
| (ख) | **वह व्यक्ति सभ्य कहलाता है जो –**<br>1. जिसनेनएतथ्यों की खोज कीहै।<br>2. जिसेअपनेपूर्वजोंसेवस्तुअनायासहीप्राप्तहुईहै।<br>3. जिसने गुरुत्वाकर्षण की खोज की।<br>4. उसनेअपनेविवेककाप्रयोगकियाहै।<br><br>(i) कथन1,2,4 सहीहै।<br>(ii) कथन2सहीहै।<br>(iii) कथन3और4सहीहैं।<br>(iv) कथन1 और2 सहीहैं। | 1 |
| (ग) | **न्यूटनकोसंस्कृतमानवकिस आधार परकहाजासकताहै?**<br>(i) न्यूटनभौतिकविज्ञानकोजानता था<br>(ii) न्यूटनअनेकबातोंसेपरिचितथा।<br>(iii) न्यूटनसभ्यदिखता था ।<br>(iv) न्यूटननेगुरुत्वाकर्षणसिद्धांतकाआविष्कारकिया। | 1 |

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| (घ) | **कथन (A) आजकेभौतिकविज्ञानकेविद्यार्थीकोसभ्यकहसकतेहैं संस्कृत नहीं।**<br>**कारण (R) विद्यार्थी नेगुरुत्वाकर्षणकेसिद्धांतकाआविष्कारकिया।**<br>**(i)** कथन (A) औरकारण (R) दोनोंसहीहैंतथाकारण (R), कथन (A) कीसहीव्याख्याकरताहै।<br>(ii) कथन (A) औरकारण (R) दोनोंसहीहैं, परंतुकारण (R), कथन (A) कीसहीव्याख्यानहींकरताहै।<br>(iii) कथन (A) सहीहै, किंतुकारण (R) गलतहै।<br>(iv) कथन (A) गलतहै, किंतुकारण (R) सहीहै। (A) आजकेभौतिक विज्ञानकेविद्यार्थीकोसभ्यकहसकतेहैं। | 1 |
| (ङ) | भौतिकविज्ञानकेविद्यार्थीकोन्यूटनकीअपेक्षाअधिकसभ्य क्यों कहा गया है ?<br>(i) क्योंकिउसेन्यूटनकेबादकीअनेकबातोंकाज्ञानथा।<br>(ii) क्योंकिउसेसिद्धांतोंकीजानकारीनहींथी।<br>(iii) क्योंकिविद्यार्थीन्यूटनकेगुरुत्वाकर्षणसे परिचितनहींहै।<br>(iv) क्योंकिउसेसंस्कृतिकीपहचानथी। | 1 |
| 8 | **निर्धारित गद्यपाठोंकेआधारपरनिम्नलिखितचारप्रश्नोंमेंसेकिन्हींतीनप्रश्नोंकेउत्तरलगभग25-30शब्दोंमेंलिखिए:** | (3x2=6) |
| (क) | महानगरोंमेंरहनेवालेलोगप्रायः"पड़ोसकल्चर"सेवंचितक्योंरहजातेहैं? 'एक कहानी यह भी' पाठ के आधारपरस्पष्टकीजिए। | 2 |
| (ख) | 'नेताजी का चश्मा' पाठ में देशभक्ति की भावना पर किस प्रकार बल दिया गया है?स्पष्ट करें। | 2 |
| (ग) | 'बालगोबिनभगत' पाठकेआधारपरबताएकिबालगोबिनभगतकीदिनचर्या लोगोंकेआश्चर्यकाविषयक्योंथी? | 2 |
| (घ) | बिस्मिल्ला खाँ की एक संगीत साधक के रूप में क्या विशेषताएँ थी ?सोदाहरण स्पष्ट करें । | 2 |

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| 9 | **निम्नलिखितपठितकाव्यांशपरआधारितबहुविकल्पीयप्रश्नोंकेसर्वाधिकउपयुक्त उत्तर वालेविकल्पचुनकरलिखिए:**<br>बहसिलखनबोलेमृदुबानी।अहोमुनीसुमहाभटमानी।।<br>पुनिपुनिमोहिदेखावकुठारू।चहतउड़ावनफूँकिपहारू।।<br>इहाँकुम्हड़बतिआकोउनाहिं।जेतरजनीदेखिमरिजाहीं।।<br>देखिकुठारूसरासनबाना।मैंकछुकहासहितअभिमाना।।<br><br>भृगुसुतसमुझिजनेउबिलोकी।जोकछुकहहुसहौंरिसरोकी।।<br>सुरमहिसुरहरिजनअरुगाई।हमरेकुलइन्हपरनसुराई।।<br>बधेपापुअपकीरतिहारें।मारतहूँपापरिअतुम्हारें।<br>कोटिकुलिससमबचनुतुम्हारा।ब्यर्थधरहुधनुबानकुठारा।।<br><br>जोबिलोकिअनुचितकहेउँछमहुमहामुनिधीर।<br>सुनिसरोषभृगुबंसमनिबोलेगिरागंभीर।। | (5x1=5) |
| (क) | **'चहतउड़ावनफूँकिपहारु' पंक्तिकाआशयहैसहीविकल्पकाचयनकीजिए।**<br>1. फूँककरपहाड़उठानाचाहतेहैं ।<br>2. फूँककरपहाड़परचढ़नाचाहतेहैं ।<br>3. कुठारकोफूँकमारकरउड़ानाचाहतेहैं ।<br>4. बाणकोफूँकसेउठानाचाहतेहैं।<br>**कूट**<br>(i) कथन1सहीहै।<br>(ii) कथन2सहीहै।<br>(iii) कंथन1और2सहीहैं।<br>(iv) कथन3 और4 सहीहैं। | 1 |
| (ख) | **'भृगुसुत' शब्द किसके लिए प्रयुक्त हुआ है?**<br>(i) श्री राम के लिए<br>(ii) लक्ष्मण के लिए<br>(iii) परशुराम के लिए<br>(vi) वाल्मीकि के लिए | 1 |
| (ग) | **कथन (A) लक्ष्मणजीपरशुरामको ब्राह्मण जानकर उनका वध नहीं कर रहे।**<br>**कारण (R) उनके कुल में किसी का वध नहीं किया जाता ।**<br>(i) कथन (A) औरकारण (R) दोनोंसहीहैंतथाकारण(R),कथन (A) कीसहीव्याख्याकरताहै।<br>(ii)कथन (A) औरकारण (R) दोनोंसहीहैं, परंतुकारण (R), कथन (A) कीसहीव्याख्यानहींकरताहै।<br>(iii)कथन (A) सहीहै, किंतुकारण (R) गलतहै।<br>(iv) कथन (A) गलतहै, किंतुकारण (R) सहीहै। | 1 |

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| (घ) | **काव्यांशकेअनुसाररघुकुलकीमर्यादाहै।**<br>(i) देवता, ब्राह्मण, हरिभक्तवगायकीरक्षाकरना<br>(ii) स्त्रीकासम्माननहींकरना<br>(iii) लोगोंपरअत्याचारकरना<br>(iv) बड़े-बुजुर्गोंकासम्माननहींकरना | 1 |
| (ङ) | **परशुरामकेवचनोंकीक्याविशेषताहै?सहीविकल्पकाचयनकीजिए।**<br>(1) वेअत्यंतमृदुवचनबोलतेहैं।<br>(2)वेअत्यंतकटुवचनबोलतेहैं\|<br>(3)वेव्यर्थढींगे नहीं हाँकते हैं\|<br>(4) वेकरोड़ोंवज्रोंकेसमानकठोरवचनबोलतेहैं।<br>**कूट**<br>(i) कथन1सहीहै।<br>(ii) कथन1और2सहीहैं।<br>(iii) कथन3और4सहीहैं।<br>(iv) कथन 2, 4 सही है। | 1 |
| 10 | **निर्धारित कविताओंकेआधारपरनिम्नलिखितचारप्रश्नोंमेंसेकिन्हींतीनप्रश्नों केउत्तरलगभग25-30 शब्दोंमेंलिखिए:** | (3x2=6) |
| (क) | 'अटनहींरहीहै' कविताकेआधारपरबताइएकिफागुनमासकेआनेसेपेड़ों कीडालियोंकेस्वरूपमेंक्यापरिवर्तनदिखाईदेताहै? | 2 |
| (ख) | सूरदासद्वाराप्रस्तुतपदोंकेआधारपरगोपियोंकायोगसाधनाकेप्रतिदृष्टिकोण स्पष्टकीजिए। | 2 |
| (ग) | संगतकारकीआवाजमेंदिखाईदेनेवालीहिचकक्याप्रदर्शितकरतीहै? | 2 |
| (घ) | कवि के जीवन के अनुभव ही उन्हें आत्मकथा लिखने से रोकते हैं । 'आत्मकथ्य' कविता के आधार पर उत्तर लिखें। | 2 |
| 11 | **पूरकपाठ्यपुस्तककेपाठोंपरआधारितनिम्नलिखिततीनप्रश्नोंमेंसेकिन्हींदोप्रश्नोंकेउत्तरलगभग 50-60 शब्दोंमेंलिखिए:** | (2x4=8) |
| (क) | "माताकाअंचल' पाठ में ग्रामीण परिवेश का चित्रण किया गया है।आप ग्रामीण परिवेश और शहरी जीवन में क्या अंतर पाते हैं ? | 4 |
| (ख) | पेड़, पौधे, पशु और आदमी सब अपनी-अपनी लय, ताल और गति में हैं।हमारी पीढ़ी ने प्रकृति की इस लय, ताल और गति से खिलवाड़ कर अक्षम्य अपराध किया है।<br>'साना-साना हाथ जोड़ि' पाठ के आधार पर बताइए कि इस अक्षम्य अपराध का प्रायश्चित मनुष्य किस प्रकारकर सकता है? | 4 |

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| (ग) | 'मैं क्यों लिखता हूँ' पाठ के आधार पर लेखक ने अपने आपको हिरोशिमा के विस्फोट का भोक्ता कब और किस तरह महसूस किया? | 4 |
| | खंड-घ (रचनात्मक लेखन) | **20** |
| 12 | **निम्नलिखिततीनविषयोंमेंसेकिसीएकविषयपरसंकेत बिन्दुओं के आधार पर लगभग120शब्दोंमेंएकअनुच्छेदलिखिए।**<br>(क) प्राकृतिकआपदाएँ<br>संकेतबिंदु<br>•भूमिका<br>•प्राकृतिकआपदाओंकेदुष्प्रभाव<br>•प्राकृतिकआपदाओंकेकारण<br>•बचावकेउपाय<br>(ख) सड़क सुरक्षा- जीवन रक्षा<br>**संकेत बिंदु** :<br>• यातायात के नियमों के पालन का महत्त्व<br>• नियम का पालन न करने से<br>• नियम पालन की उपयोगिता<br>• सड़क सुरक्षा के लिए बनाए गए नियमों का पालन करने का संकल्प<br>•<br>(ग) इंटरनेटकीदुनिया<br>संकेतबिंदु:<br>• भूमिका<br>• भारतएवंविश्वमेंइंटरनेटकीस्थिति<br>• इंटरनेटकेलाभ<br>• इंटरनेटकेदुष्परिणाम | (1x6=6) |
| | | |
| 13 | (क) आपस्वातिगाँधी /अनूपगाँधीहैं।समाचार-पत्रोंमेंविज्ञापनोंकीभरमारकोकमकरनेऔरसमसामयिकविषयोंपरलेखनकीआवश्यकताकोदर्शातेहुएदैनिकजागरणसमाचार-पत्रकेसंपादककोअनुरोधकरतेहुए100शब्दोंमेंपत्रलिखिए।<br>अथवा<br>(ख) आपकानामराजसिंह / राधाराजपूतहै।आपअपनेविद्यालयकेछात्र-छात्राओंकेसाथ बाढ़ पीड़ित लोगों की सेवाकेलिएजानाचाहतेहो।इसकार्यहेतुअनुमतिमाँगतेहुएअपनेपिताको100 शब्दोंमें पत्र लिखिए । | (1x5=5) |

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| 14 | क) आपकानामआशीषशर्मा/आशाशर्माहै।आप बी.एड. कर चुके हैं ।विद्यास्थली स्कूल में विज्ञान शिक्षक का पद रिक्त है।इसके लिए संक्षिप्तस्ववृत्त (बायोडाटा) लगभग80शब्दोंमेंतैयारकीजिए।<br>अथवा<br>(ख) आप मेधावी / माधव हैं। आपका ए.टी.एम.कार्ड खो गया है ।उसकी सूचना देते हुए 'नेशनल बैंक' के शाखा प्रबंधक को लगभग80 शब्दों में एक ई-मेल लिखिए। | (1x5=5) |
| 15 | (क) प्रदूषण से बचने के लिए पर्यावरण विभाग की ओर से जनहित में जारी एक आकर्षक विज्ञापन लगभग 40 शब्दों में तैयार कीजिए ।<br>अथवा<br>(ख) आपकेछोटेभाईनेएकनयाघरखरीदाहै, जिसकीबधाईस्वरूपएकसंदेश40 शब्दों में लिखिए । | (1x4=4) |

# पूर्व -परिषदीय परीक्षा-2025-26 / PRE-BOARD EXAM-(2025-26)

## कक्षा X / CLASS – X

**TIME: 2 Hrs** **विषय: / SUBJECT: ARTIFICIAL INTELLIGENCE (417)** **MM: 50**

**General Instructions:**
1. Please read the instructions carefully.
2. This Question Paper consists of 21 questions in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.
5. All questions of a particular section must be attempted in the correct order.
6. SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):
7. i. This section has 05 questions.
8. ii. Marks allotted are mentioned against each question/part.
9. iii. There is no negative marking.
10. iv. Do as per the instructions given.
11. SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):
12. i. This section has 16 questions.
13. ii. A candidate has to do 10 questions.
14. iii. Do as per the instructions given.
15. iv. Marks allotted are mentioned against each question/part.

| | **SECTION A – OBJECTIVE TYPE QUESTIONS** | |
|---|---|---|
| Q. No. | **Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)** | Marks |
| Q1.1 | i. Which of the following is an example of **self-management**?<br>(a) Procrastinating tasks<br>(b) Setting daily goals and achieving them<br>(c) Ignoring deadlines<br>(d) Avoiding teamwork | 1 |
| Q1.2 | ii. In MS Word, pressing **Ctrl + S** is used to:<br>(a) Save a file<br>(b) Print a file<br>(c) Close the window<br>(d) Open a file | 1 |
| Q1.3 | iii. Assertion (A): Entrepreneurs take calculated risks.<br>Reason (R): Risk-taking is not an essential quality for entrepreneurship.<br>Options:<br>(a) Both A and R are correct, R explains A<br>(b) Both A and R are correct but R does not explain A<br>(c) A is correct but R is incorrect<br>(d) A is incorrect but R is correct | 1 |
| Q1.4 | iv. Identifying **urgent vs. important** work is an example of:<br>(a) Organising<br>(b) Prioritising<br>(c) Tracking<br>(d) Delegating | 1 |
| Q1.5 | v. Which of the following is an **environment-friendly practice**? | 1 |

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| | (a) Excessive use of plastic bags<br>(b) Using solar panels for electricity<br>(c) Burning fossil fuels<br>(d) Wasting water | |
| Q1.6 | vi. While writing an email, **clarity and conciseness** reflect which communication skill?<br>(a) Listening skills<br>(b) Non-verbal skills<br>(c) Writing skills<br>(d) Speaking skills | 1 |
| | **Answer any 5 out of the given 6 questions on Employability Skills (1 x 5 = 5 marks)** | |
| Q2.1 | i. Assertion (A): AI is used in weather forecasting.<br>Reason (R): AI cannot process large data sets.<br>(a) Both A & R correct, R explains A<br>(b) Both A & R correct, R not explanation<br>(c) A correct, R incorrect<br>(d) A incorrect, R correct | 1 |
| Q2.2 | ii. Which of the following is an **AI ethical concern**?<br>(a) Using AI for medical diagnosis<br>(b) AI replacing jobs<br>(c) AI in fraud detection<br>(d) AI in chatbots | 1 |
| Q2.3 | iii. Which of the following best explains the role of Computer Vision in healthcare?<br>(a) Detecting tumours from medical scans<br>(b) Converting speech into text<br>(c) Analysing purchase history for predictions<br>(d) Translating languages | 1 |
| Q2.4 | iv. In a neural network, the **last layer** is called:<br>(a) Input layer (b) Hidden layer (c) Output layer (d) Middle layer | 1 |
| Q2.5 | v. A word occurring very frequently in a dataset like “the”, “is” is called:<br>(a) Rare word<br>(b) Stop word<br>(c) Unique word<br>(d) Keyword | 1 |
| Q2.6 | vi. Which of these is an example of **structured data**?<br>(a) Social media posts<br>(b) Audio recordings<br>(c) Excel spreadsheet of student marks<br>(d) Images | 1 |
| | **Answer any 5 out of the given 6 questions on Employability Skills (1 x 5 = 5 marks)** | |
| Q3.1 | Which of the following **is NOT AI**?<br>(a) Alexa voice assistant<br>(b) Autopilot in airplanes<br>(c) Washing machine with timer<br>(d) Google Translate | 1 |
| Q3.2 | Features collected during Data Science are called:<br>(a) Instances (b) Labels (c) Attributes (d) Files | 1 |
| Q3.3 | Which of these is an AI application in healthcare?<br>(a) Online ticket booking<br>(b) X-ray image analysis<br>(c) Weather prediction<br>(d) E-commerce cart system | 1 |
| Q3.4 | Identifying faces in CCTV footage is an example of: | 1 |

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| | (a) Classification<br>(b) Object Detection<br>(c) Sentiment Analysis<br>(d) Translation | |
| Q3.5 | Which type of chatbot can **learn and improve** over time?<br>(a) Scripted bot<br>(b) Smart bot<br>(c) Rule-based bot<br>(d) Static bot | 1 |
| Q3.6 | Precision & Recall are combined in:<br>(a) Confusion matrix<br>(b) Accuracy<br>(c) F1 Score<br>(d) ROC Curve | 1 |
| | **Answer any 5 out of the given 6 questions on Employability Skills (1 x 5 = 5 marks)** | |
| Q4.1 | AI systems that learn from **large datasets using multiple layers** are called:<br>(a) Deep Learning<br>(b) Data Mining<br>(c) Machine Learning<br>(d) Supervised Learning | 1 |
| Q4.2 | Assertion (A): Training data is used to build the model.<br>Reason (R): Testing data is used to check accuracy.<br>Options:<br>(a) Both A & R correct, R explains A<br>(b) Both A & R correct, R not explanation<br>(c) A correct, R incorrect<br>(d) A incorrect, R correct | 1 |
| Q4.3 | A **colour image** generally has how many channels?<br>(a) 1 (b) 2 c) 3 (d) 4 | 1 |
| Q4.4 | Which NLP application detects customer feedback mood?<br>(a) Machine Translation<br>(b) Sentiment Analysis<br>(c) Speech Recognition<br>(d) Text Summarisation | 1 |
| Q4.5 | Using the **same dataset** for training and evaluation causes:<br>(a) Bias<br>(b) Overfitting<br>(c) Underfitting<br>(d) Normalisation | 1 |
| Q4.6 | Data used for **checking accuracy of a model** is called:<br>(a) Raw data<br>(b) Testing data<br>(c) Training data<br>(d) Noise | 1 |
| | **Answer any 5 out of the given 6 questions on Employability Skills (1 x 5 = 5 marks)** | |
| Q5.1 | Google Translate belongs to which AI domain?<br>(a) Computer Vision<br>(b) Data Science<br>(c) Natural Language Processing<br>(d) Robotics | 1 |
| Q5.2 | The smallest unit of an image is called:<br>(a) Vector (b) Pixel (c) Byte (d) Frame | 1 |

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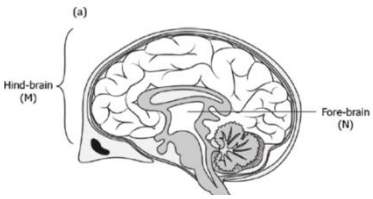
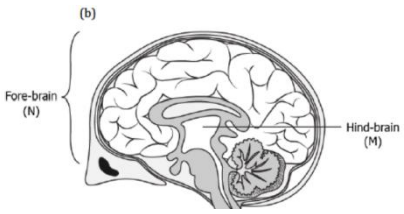
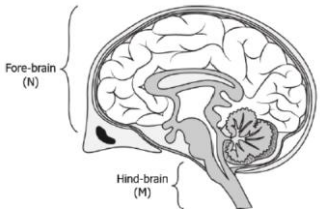
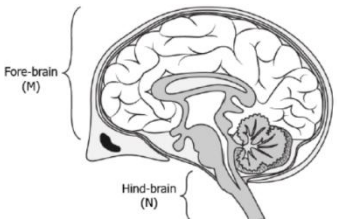
| Q5.3 | The **grammar rules** of a language define its:<br>(a) Semantics (b) Syntax (c) Vocabulary (d) Sentiment | 1 |
| Q5.4 | Creating word frequency from a text corpus is done using:<br>(a) Tokenisation<br>(b) Bag of Words<br>(c) Stemming<br>(d) Lemmatization | 1 |
| Q5.5 | In AI evaluation, **high false positives** in a medical test mean:<br>(a) Healthy patient predicted sick<br>(b) Sick patient predicted healthy<br>(c) All predictions are correct<br>(d) None of these | 1 |
| Q5.6 | Which of these is an AI application in **banking**?<br>(a) Chatbots for customer queries<br>(b) Washing machine sensors<br>(c) IoT smart lighting<br>(d) Alarm clock | 1 |
| | **SECTION B – SUBJECTIVE TYPE QUESTIONS** | |
| Q. No. | **Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)**<br>**Answer each question in 20 – 30 words.** | Marks |
| Q6 | Mention any two advantages of face-to-face communication? | 2 |
| Q7 | Why is time management important for students? | 2 |
| Q8 | What is phishing in computer terminology? | 2 |
| Q9 | Give two qualities of a successful entrepreneur? | 2 |
| Q10 | List two human practices that support sustainable development? | 2 |
| | **Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)** | |
| Q11 | Why do social media apps collect user data? | 2 |
| Q12 | Which learning approach is used when the dataset has both input and output labels? | 2 |
| Q13 | List two precautions while collecting data for an AI project . | 2 |
| Q14 | Explain the term "Pixel Resolution" with an example. ? | 2 |
| Q15 | Identify two stop words from the sentence:<br>"Students are preparing for the annual school function today." | 2 |
| Q16 | Draw a confusion matrix if TP=30, TN=50, FP=20, FN=10. ? | 2 |
| | **Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)** | |
| Q17 | Define Artificial Intelligence. Explain with an example from daily life? | 4 |
| Q18 | List some advantages and disadvantages of Neural Network. | 4 |
| Q19 | Differentiate between **Supervised and Unsupervised Learning** with examples. ? | 4 |
| Q20 | What challenges may occur when training AI systems to understand human languages? Give two points ? | 4 |
| Q21 | An AI model predicted student exam results:<br><br>**Reality** **Pass** **Fail**<br>Predicted Pass 40 15<br>Predicted Fail 10 35<br><br>(i) How many wrong predictions are there?<br>(ii) Calculate **Precision**, **Recall**, and **F1 Score**. | 4 |

# Pre-Board Examination (2025-26)
## Class:10
## Subject & Subject Code: Science Theory, (086)

**Time:3 hours** **Max. Marks: 80**

**Instructions:**
*(i) This question paper consists of 39 questions in 3 sections. Section A is Biology; Section B is Chemistry and Section C is Physics.*
*(ii) All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.*

| Q. No. | SECTION-A | Marks |
|---|---|---|
| 1 | Which of the following events in the mouth cavity will be affected if salivary amylase is lacking in the saliva?<br>**A.** Starch breaking down into sugars.<br>**B**. Proteins breaking down into amino acids.<br>C. Absorption of vitamins.<br>**D**. Fats breaking down into fatty acids and glycerol. | 1 |
| 2 | Height of a plant is regulated by:<br>**A**. D.N.A which is directly influenced by growth hormone<br>B. Genes which regulate the protein directly<br>**C**. Growth hormones under the influence of the enzyme coded by a gene.<br>**D**. Growth hormones directly under the influence of gene | 1 |
| 3 | The part where the exchange of gases occurs during respiration is:<br>**A**. Lungs and larynx **B**. Alveoli and throat<br>**C**. Throat and lungs **D**. Alveoli and capillaries | 1 |
| 4 | What is the ratio of average amount of energy absorbed by producers to the average amount of energy absorbed by the primary consumers?<br>A. 1:2 B. 2:1<br>C. 1:10 D. 10:1 | 1 |
| 5 | Which of the following option illustrates the location of the centre that controls the feelings associated with hunger (M) and the centre that allows a person to walk in a straight line (N)?<br>**A.**  <br>**B.**  <br>**C.**  <br>**D.**  | 1 |

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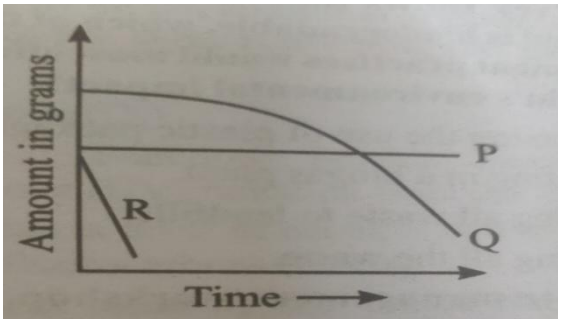
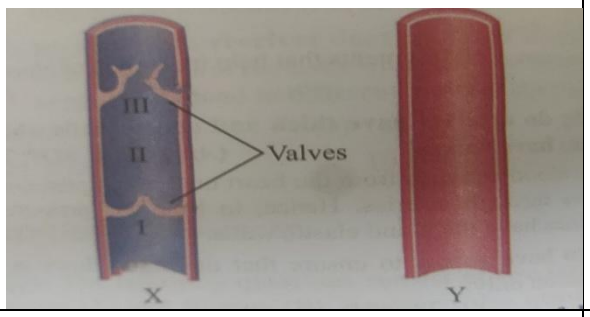
| 6 | Samaira conducted an experiment where she buried three different types of solid wastes (**P, Q** and **R**) under the soil in a pot to study their decomposition rates. The graph below shows the decomposition rates of these wastes over time.<br>  <br><br>**Select the option that correctly identifies P, Q and R:** | 1 |

| Option | P | Q | R |
|---|---|---|---|
| **A** | Banana peel | Plastic bottle | Paper cup |
| **B** | Polythene bag | Bone | Orange peel |
| **C** | Apple core | Metal Can | Cardboard |
| **D** | Rubber cover | Vegetable scrap | Wooden stick |

| | | |
|---|---|---|
| 7 | A monohybrid cross was conducted between one variety of pea plants having pods that are full (FF) and another having pods that are constricted (ff).<br>What is the percentage of heterozygous offsprings in F1 generation?<br>A. 0% B. 25% C. 75% D.100% | 1 |
| | **Following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:**<br>**A.** Both 'A' and 'R' are true, and 'R' is correct explanation of the Assertion.<br>**B.** Both 'A' and 'R' are true, but 'R' is not correct explanation of the Assertion.<br>**C.** 'A' is true, but 'R' is false.<br>**D.** 'A' is false, but 'R' is true. | |
| 8 | **Assertion (A):** The trophic level in a food chain should be limited.<br>**Reason (R)**: There is a loss of energy as we go from one trophic level to the next, this limits the number of trophic levels in a food chain. | 1 |
| 9 | **Assertion(A):** The effect of auxin hormone on the growth of root is exactly opposite to that on a stem.<br>**Reason (R):** Auxin hormone increases the rate of growth in root and decreases the rate of growth in stem. | 1 |
| 10 | All plants give out oxygen during the day and carbon dioxide during night. Do you agree with this statement? Give reason. | 2 |
| 11 | **<u>Students to attempt either option A or B.</u>**<br>**A.** "The improvement in our lifestyle has led to the generation of large amount of waste material." List two reasons to justify this statement.<br>**OR**<br>**B.** If all the waste generated is biodegradable, will this have an impact on the environment? Justify you answer. | 2 |

| | | |
|---|---|---|
| 12 | Given below are two different types of blood vessels X and Y.<br>Based on your observation, answer the following questions:<br>**(i)** Identify X and Y<br>**(ii)** In which direction does blood flow in X? Do you think blood will flow from I to II? Give reason for your answer.<br>  <br> | 2 |
| 13 | A 10 year old child was observed to be significantly shorter than other children of the same age. After a medical examination it was found that the child had deficiency of a particular hormone. Considering this scenario:<br>**(i)** Identify the hormone likely to be deficient and the gland responsible for its secretion.<br>**(ii)** Name the disorder caused due to over and under secretion of this hormone. | 3 |
| 14 | A green stemmed rose plant denoted by GG and a brown stemmed rose plant denoted by gg are allowed to undergo a cross with each other.<br>**A.** List your observation regarding:<br>(i) Colour of stem in F1 progeny.<br>(ii) Percentage of brown stemmed plants in F2 progeny if F1 plants are self-pollinated.<br>(iii) Ratio of GG and Gg in F2 progeny.<br>**B.** Based on the findings of this cross, what conclusion can be drawn? | 3 |
| 15 | The human digestive system is a tube running from mouth to anus. Its main function is to break-down complex molecules present in the food which cannot be absorbed as such into smaller molecules. These molecules are absorbed across the walls of the tube, and the absorbed food reaches each and every cell of the body where it is utilised for obtaining energy.<br>Based on the understanding of the concept answer the following questions:<br><br>**(i)**. Name the glands present in the buccal cavity and write the components of food on which the secretion of these glands act upon.<br>(ii) Two organs have a sphincter muscle at their exit. Name them.<br>**<u>Attempt either option (iii) or (iv)</u>**<br>**(iii)** What will happen if:<br>(a) mucus is not secreted by the gastric glands.<br>(b) Villi are absent in the small intestine.<br>**OR**<br>**(iv)**. "Bile juice does not contain any enzyme, yet it has important roles in digestion." Justify the statement. | 4 |

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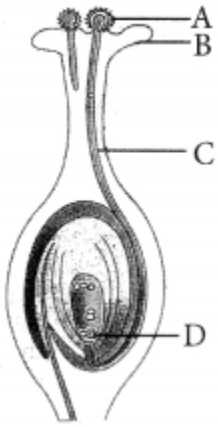
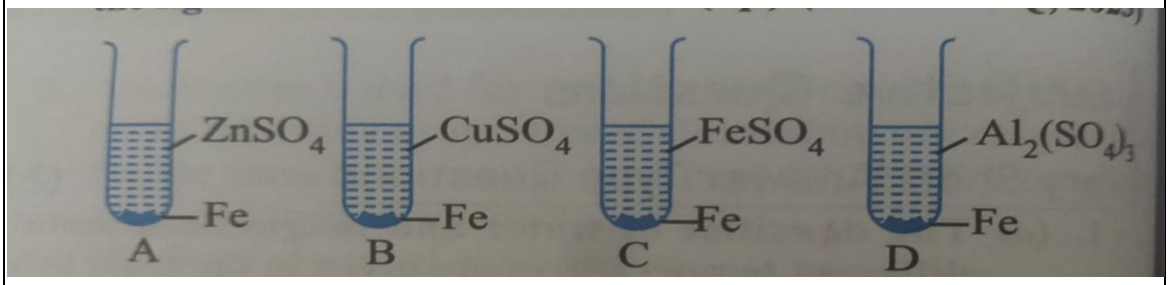
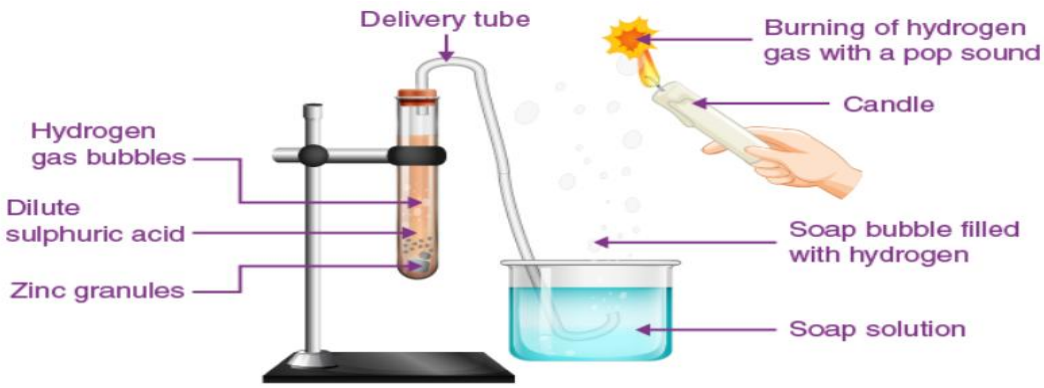
| 16 | **Attempt either option A or B.**<br>**A.** (a)List two reasons for the appearance of variations among the progeny formed by sexual reproduction.<br>(b)  <br><br>(i) Name the part marked A in the diagram.<br>(ii) How does A reach part B?<br>(iii) State the importance of the part C.<br>(iv) What happens to the part marked D after fertilisation is over?<br>**OR**<br>**B**. (a)What are sexually transmitted diseases?<br>(b) List one example of each of diseases caused due to: (i) bacterial infection and (ii) viral infection.<br>(c)Which device or devices may be used to prevent the spread of such diseases?<br>(d) How does the use of contraceptive methods have a direct effect on the health and prosperity of a family? | 5 |
| | **SECTION-B** | |
| 17 | Which among the following statement(s) is (are) true?<br>Exposure of silver chloride to sunlight for a long duration turns grey due to -<br>(i) the formation of silver by decomposition of silver chloride<br>(ii) sublimation of silver chloride<br>(iii) decomposition of chlorine gas from silver chloride<br>(iv) oxidation of silver chloride<br>**A**. (i) only **B.** (i) and (iii)<br>**C**. (ii) and (iii) **D.** (iv) only | 1 |
| 18 | You are having five solutions X, Y, Z, A and B with pH values as follows<br>X=1.8, Y=7, Z=8.5, A=8 and B=5<br>Which solution would be most likely to liberate hydrogen with magnesium powder?<br>A. Solution X and Y B. Solution X<br>C. Solution Z and B D. Solution A | 1 |
| 19 | Which of the following can undergo a chemical reaction?<br>**A**. $MgSO_4 + Fe$ **B**. $ZnSO_4 + Fe$<br>**C**. $MgSO_4 + Pb$ **D**. $CuSO_4 + Fe$ | 1 |
| 20 | The displacement reaction between iron (III) oxide and a metal X is used for welding the rail tracks. Here X is:<br>**A**. Copper granules **B**. Magnesium ribbon<br>**C**. Sodium pellets **D.** Aluminium dust | 1 |
| 21 | What happens when a solution of an acid is mixed with a solution of a base in a test tube?<br>(i) Temperature of the solution decreases<br>(ii) Temperature of the solution increases<br>(iii) Temperature of the solution remains the same<br>(iv) Salt formation takes place<br>**A**. (i) and (iv) **B.** (i) and (iii)<br>**C.** (ii) only **D.** (ii) and (iv) | 1 |

| | | |
|---|---|---|
| 22 | The electronic configuration of three elements X, Y and Z are as follows:<br>X = 2, 4; Y = 2, 7; Z = 2,1 Which two elements will combine to form an ionic compound and choose the correct formula -<br>**A**. $X_2Y$ **B**. Z Y **C**. XZ **D.** $Y_2Z$ | 1 |
| 23 | Which of the following statements is correct about an aqueous solution of an acid and of a base?<br>(i) Higher the pH, stronger the acid<br>(ii) Higher the pH, weaker the acid<br>(in) Lower the pH, stronger the base<br>(iv) Lower the pH, weaker the base<br>**A.** (i) and (iii) **B.** (ii) and (iii)<br>**C.** (i) and (iv) **D.** (ii) and (iv) | 1 |
| | **The following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:**<br>A. Both 'A' and 'R' are true, and 'R' is the correct explanation of the Assertion.<br>B. Both 'A' and 'R' are true, but 'R' is not the correct explanation of the Assertion.<br>C. 'A' is true, but 'R' is false.<br>D. 'A' is false, but 'R' is true. | |
| 24 | **Assertion (A):** Following are the members of a homologous series:<br>$CH_3OH$, $CH_3CH_2OH$, $CH_3CH_2CH_2OH$<br>**Reason (R):** A series of compounds with same functional group but differing by - $CH_2$ unit is called a homologous series. | 1 |
| 25 | Sakshi was comparing the reactivity of different metals for her science project. She added iron filings in four test tubes A, B, C and D containing aqueous solution of $ZnSO_4$, $CuSO_4$, $FeSO_4$ and $Al_2(SO_4)_3$ respectively as shown in the figure:<br>  <br><br>**(i)** In which test tube will she observe the reaction to be most vigorous? Give reason for her observation.<br>**(ii)** Write a balanced equation of the reaction. | 2 |
| 26 | **(i)** Oxide of an element X is used intensively in the cement industry. This element is present in bones also. On treatment with water, it forms a solution which turns red litmus blue. Identify X and write the chemical reactions involved.<br>**(ii)** What happens when hydrogen gas is passed over the heated CuO? Mention the colour change and write chemical equation for the reaction. | 3 |
| 27 | **<u>Attempt either option A or B.</u>**<br>**A.** Metal X is found in nature as its sulphide XS. It is used in the galvanisation of iron articles.<br>(i) Identify the metal X.<br>(ii) How will you convert this sulphide ore into the metal? Explain with equations. | 3 |

| | | |
|---|---|---|
| | **OR**<br>**B.** In the formation of a compound between two atoms P and R, P loses two electrons and R gains one electron.<br>(i) What is the nature of the bond between P and R?<br>(ii) Give the formula of the compound formed between P and R.<br>(iii) Draw the electron-dot structure of $MgCl_2$<br>(iv) NaCl has high melting point. Why? | |
| 28 | The preparation of hydrogen gas is shown in the figure given below. What would happen if the following changes are made?<br>  <br><br>**(i)**. Instead of dilute sulphuric acid, dilute hydrochloric acid is taken<br>**(ii)** In place of zinc, copper turnings are taken. Give reason for your answer.<br>**<u>Attempt either option (iii) or (iv)</u>**<br>**(iii)**. In place of zinc granules, the same amount of zinc dust is taken in the test tube.<br>**OR**<br>**(iv)**. Sodium hydroxide is taken in place of dilute sulphuric aciacid,d the tube is heated. Give equation for the reaction taking place. | 4 |
| 29 | **<u>Attempt either option A or B.</u>**<br>**A**. A carbon compound 'P' on heating with excess conc. $H_2SO_4$ forms another carbon compound 'Q' which on addition of hydrogen in the presence of nickel catalyst forms a saturated carbon compound 'R'. One molecule of 'R' on combustion, forms two molecules of carbon dioxide and three molecules of water. Identify P, Q and R and write chemical equations for the reactions involved.<br>**OR**<br>**B.** (i) The molecular formula of two carbon compounds X and Y are $C_4H_8$ and $C_5H_{12}$ respectively. Which one of the two is most likely to show addition reaction? Justify your answer. Also give the chemical equation to explain the process of addition reaction in this case.<br>(ii) Write the structural formula of ethanol. What happens when it is heated with excess of conc. $H_2SO_4$ at 443 K? Write the chemical equation for the reaction stating the role of conc. $H_2SO_4$ in this reaction. | 5 |
| | **SECTION-C** | |
| 30 | The diagrams showing the correct path of the ray after passing through a convex lens are - | 1 |

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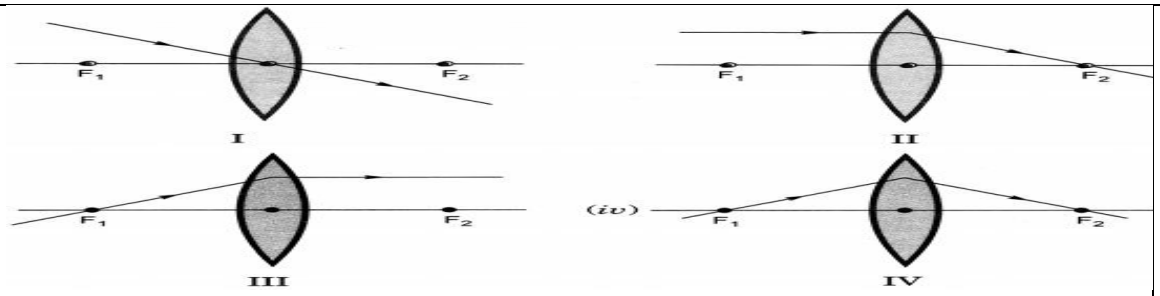
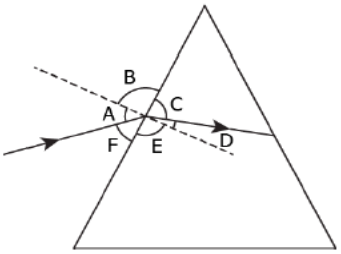
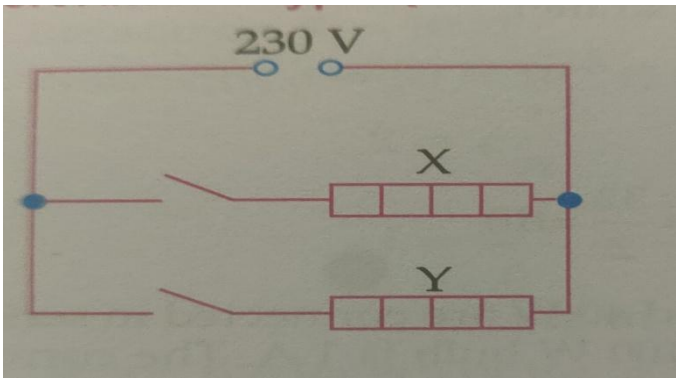
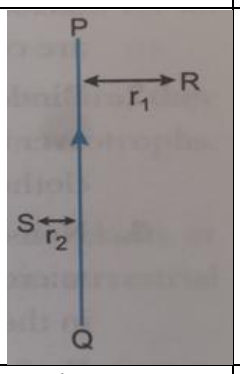
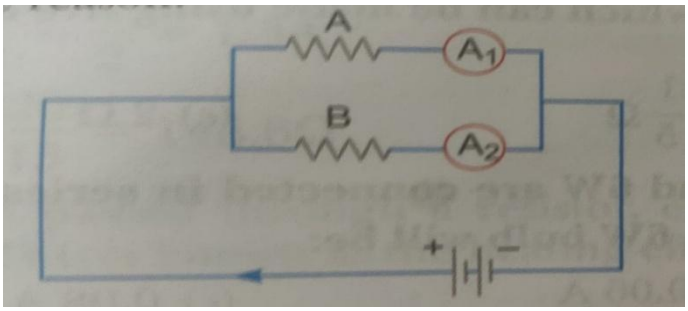
|---|---|---|
| |  <br>A. II and III only B. I and II only<br>C. I, II and III D. I, II and IV | |
| 31 | The image shows a light ray incident on a glass prism.<br><br>The various angles are labelled in the image. Which angle shows the angle of incidence and angle of refraction, respectively?<br>**A.** D and F **B.** C and F<br>**C.** B and E **D.** A and D<br>  | 1 |
| 32 | A ray of light is travelling in a direction perpendicular to the boundary of a parallel glass slab. The ray of light:<br>**A.** is refracted towards the normal **B.** is refracted away from the normal<br>**C.** is reflected along the same path **D**. does not get refracted | 1 |
| 33 | **<u>Attempt either option A or B.</u>**<br><br>**A**. How you would connect three resistors each of resistance 6Ω, so that the combination has a resistance of 9Ω. Draw the circuit diagram for the same.<br>**OR**<br>**B.**<br>  <br>The electric circuit in the above figure is a cloth dryer contains two heaters X and Y in parallel. When both the switches are closed, the current in X is 3.5 A<br>Analyse the circuit give above and answer the following questions:<br>(i) Calculate the power developed in heater X, if heater X and Y both have same resistance.<br>(ii) If the resistance of X is double than Y, Calculate the current in heater Y | 2 |
| 34 | **(i)**. For the same angle of incidence of $45^0$, the refraction angle in two transparent media P and Q is $20^0$ and $30^0$ respectively. Which of the two is optically denser? Give reason for your answer.<br>**(ii)**. Absolute refractive index of two media P and Q are 1.33 and 2.52 respectively. Calculate the speed of light in medium Q if speed of light in medium P is $2 \times 10^8$ m/s. | 2 |

| | | |
|---|---|---|
| 35 | **<u>Attempt either option A or B.</u>**<br><br>**A**. A straight cylindrical conductor is suspended with its axis perpendicular to the magnetic field of a horse shoe magnet. The conductor gets displaced towards the left when current is passed through it.<br>What will happen to the displacement of the conductor if the:<br>(i) Current through it is increased?<br>(ii) Direction of current is reversed?<br>(iii) Horse shoe magnet is replaced by another stronger horse shoe magnet?<br>**OR**<br>**B**. (i) Draw the pattern of magnetic field lines due to a magnetic field through and around a current carrying circular loop.<br>(ii) Enlist any two properties of magnetic field lines. | 3 |
| 36 | **(i)**. A person suffering from presbyopia needs a bifocal lens. If he needs lenses of power +2.5D and -0.25D, which one of these two lenses is for the correction of distant vision and what is its focal length?<br>**(ii)** With the help of a labelled diagram show the path followed by a narrow beam of mono-chromatic light is passed through a glass prism. | 3 |
| 37 | PQ is the current carrying conductor in the plane of the paper as shown in the figure.<br>**(i)** Find the directions of the magnetic fields produced by it at points R and S?<br>**(ii)** Given $r_1 > r_2$, where will the strength of the magnetic field be larger? Give reason to support your answer.<br>(iii) Explain the rule that is used to find the direction of the magnetic field for a straight current carrying conductor.<br>  | 3 |
| 38 | Study the data given below showing the focal length of the three concave mirrors A, B and C and the respective distances of objects placed in front of the mirror.<br><br>**Case** / **Mirror** / **Focal length (cm)** / **Object distance (cm)**<br>1 / A / 20 / 45<br>2 / B / 15 / 30<br>3 / C / 30 / 20<br><br>**(i)** In which of the above cases the mirror will form a diminished image of the object? Justify your answer.<br>**(ii).** List two properties of the image formed by mirror in case 2.<br>**<u>Attempt either option (iii) or (iv).</u>**<br>**(iii)**. What is the nature and size of the image formed by mirror C? Draw a ray diagram to justify your answer.<br>**OR**<br>**(iv)** An object is placed at a distance of 18cm from the pole of a concave mirror of focal length 12cm. Find the position of the image formed in this case. | 4 |
| 39 | **<u>Attempt either option A or B.</u>**<br><br>**A**. (i) What is electrical resistivity?<br>(ii) In a series electrical circuit comprising of a resistor having a metallic wire, the ammeter reads 5A. The reading of the ammeter decreases to half when the length of wire is doubled. Give reason.<br>(ii) In the given circuit diagram, two resistance wires A and B are of same area of cross- section and same material but A is longer than B. Which ammeter $A_1$ or $A_2$ will indicate higher reading for current? Give reason. | 5 |

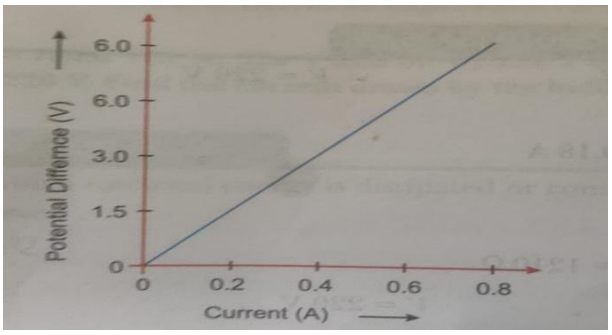



**(iii**) State Joule's law of heating. Give its mathematical expression**.**

**OR**

**B.** (i) State Ohm's law.

(ii) Name the physical quantity determined by the slope of V-I curve given in the diagram. Use this graph to find the value of this physical quantity in SI units.




(iii)A torch bulb is rated 5V and 500 mA. Calculate its: (a) power and (b) resistance.

# PRE-BOARD EXAMINATION (2025-26)
# CLASS - X
# MATHEMATICS (STANDARD) – Code No. 041

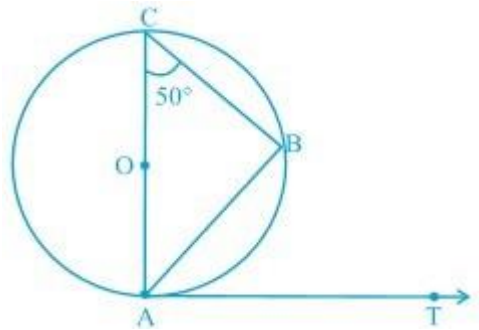
**Maximum marks:80** **Time:3 hours**

## General Instructions: -
## Read the following instructions carefully and follow them: -

1. **This question paper contains 38 questions. All Questions are compulsory.**
2. **This Question Paper is divided into 5 Sections A, B, C, D and E.**
3. **In Section A, Question numbers 1-18 are multiple choice questions (MCQs) and question no.19 and 20 are Assertion- Reason based questions of 1 mark each.**
4. **In Section B, Question numbers 21-25 are very short answer (VSA) type questions, carrying 02 marks each.**
5. **In Section C, Question numbers 26-31 are short answer (SA) type questions, carrying 03 marks each.**
6. **In Section D, Question numbers 32-35 are long answer (LA) type questions, carrying 05 marks each.**
7. **In Section E, Question numbers 36-38 are case study-based questions carrying 4 marks each with sub parts of the values of 1, 1 and 2 marks each respectively.**
8. **There is no overall choice. However, an internal choice in 2 questions of Section B, 2 questions of Section C and 2 questions of Section D has been provided. An internal choice has been provided in all the 2 marks questions of Section E.**
9. **Draw neat and clean figures wherever required. Take $\pi$ = 227 wherever required if not stated.**
10. **Use of calculators is not allowed.**

| SECTION – A<br>(Multiple Choice Questions)<br>Each MCQ of 1mark, has four options with only one correct option, choose the correct option | | |
|---|---|---|
| **Q.No.** | **Question** | **Marks** |
| **Q1.** | If two positive integers a and b are written as a= $4x^3y^2$ and b=12xy3<br>where x,y are prime numbers, then HCF(a ,b) is<br>A) xy<br>B) 4xy<br>C) $x^3y^3$<br>D) $4xy^2$ | **1** |
| **Q2.** | The sum of exponents of prime factors in the prime-factorisation of 196 is<br>A) 3<br>B) 4 | **1** |

| | | |
|---|---|---|
| | C) 5<br>D) 6 | |
| **Q3.** | The quadratic equations $x^2 - 4x + k = 0$ has distinct real roots if<br>A) k=4<br>B) k>4<br>C) k= 16<br>D) k< 4 | **1** |
| **Q4.** | Value(s) of k for which the quadratic equation $2x^2 - kx + k = 0$ has equal roots is<br>A) 0 only<br>B) 4<br>C) 8 only<br>D) 0 and 8 | **1** |
| **Q5.** | Distance between the points A(0,6) and B(0,-2) is<br>A) 7<br>B) 5<br>C) 8<br>D) -8 | **1** |
| **Q6.** | If the point (x,y) is equidistant from the points A(5,1) and B(-1,5) then<br>A) 2x=3y<br>B) 3x=2y<br>C) x=y<br>D) 4x=5y | **1** |
| **Q7.** | D and E are the midpoints of side AB and AC of ΔABC, respectively and BC = 6 cm. If DE ‖ BC, then the length of DE (in cm) is<br>(A) 2.5 (B) 3 (C) 5 (D) 6 | **1** |
| **Q8.** | A card is selected at random from a well shuffled deck of 52 cards. The probability of its being a face card is<br>A) 3/26 B)3/13 C)2/13 D)1/2 | **1** |

| | | |
|---|---|---|
| **Q9.** | If the area of circle is numerically equal to twice its circumference, then the diameter of thecircleis<br>A) 4units<br>B) 6units<br>C) 8units<br>D) 12units | **1** |
| **Q10.** | Inthefollowingfigure,ABisachordofthecircleandAOCisitsdiametersuchthat∠ACB =50°.IfATisthetangent tothecircle atthepoint A,then∠BATisequalto.<br>  <br><br>A) 65°<br>B) 60°<br>C) 50°<br>D) 40° | **1** |
| **Q11.** | TP and TQ are the two tangents to a circle with center O so that angle ∠POQ = $130^0$.Find PTQ.<br>A) $50^0$<br>B) $70^0$<br>C) $80^0$<br>D) none ofthese | **1** |
| **Q12.** | If the perimeter of a circle is equal to that of a square, then the ratio of their areas is<br>A) 22:7<br>B) 14:11 | **1** |

| | | |
|---|---|---|
| | C) 7:22<br>D) 11:14 | |
| **Q13.** | Sin 2A = 2 Sin A is true when A =<br>A) 0°<br>B) 30°<br>C) 45°<br>D) 60° | **1** |
| **Q14.** | (Sec A + tan A) (1 – Sin A) =<br>A) Sec A<br>B) Sin A<br>C) Cos A<br>D) Cot A | **1** |
| **Q15.** | The heights (in cm) of 10 students are: 150, 155, 160, 165, 170, 170, 175, 180, 185, 190. What is the median height of the students?<br>A) 165 cm B)170 cm C) 172.5 cm D) 175 cm | **1** |
| **Q16.** | If the height of a pole is equal to the length of its shadow, then the angle of elevation of the sun is<br>A) 30° B)45° C)60° D)90° | **1** |
| **Q17.** | Consider the following frequency distribution.<br>Class: 0-5, 5-10, 10-15, 15-20, 20-25<br>Frequency: 10, 15, 12, 20, 9<br>Thelower limit ofmodalclassis<br>A) 15 B)20 C)10 D)5 | **1** |
| **Q18.** | A cube of 6cm side is cut into number of cubes each of side 2cm. The number of cubes will be | **1** |

| | | |
|---|---|---|
| | A) 9<br>B) 18<br>C) 27<br>D) 36 | |

**Each of the following questions contains two statements i.e., ASSERTION and REASON, and has following four choices.**

A) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
B) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
C) Assertion (A) is true but reason (R) is false.
D) Assertion (A) is false but reason (R) is true.

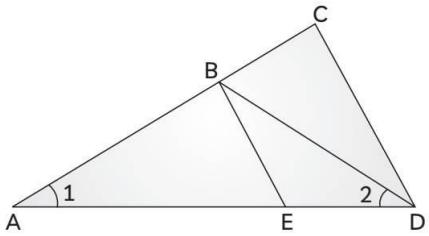
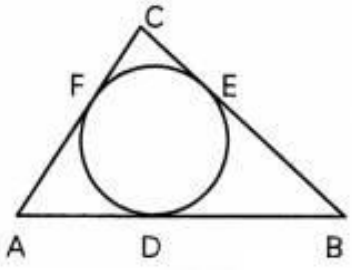
**Only one of which is the correct answer.**

| | | |
|---|---|---|
| **Q19.** | **ASSERTION (A):** The HCF of two numbers is 9 and their LCM is 2016. If the one number is 54, thenthe othernumberis 336.<br><br>**REASON (R):** Relation between numbers and their HCF and LCM is product of two numbers a, b = HCF(a,b)×LCM (a,b). | **1** |
| **Q20.** | **ASSERTION (A):** -5, -5/2, 0,5/2 …….is an Arithmetic progression.<br><br>**REASON (R):** The terms of an Arithmetic Progression cannot have both positive and negative rational numbers. | **1** |

## SECTION – B
## (Very Short Answers)

This section comprises of VSA of 2 marks each

| Q. No. | Question | Marks |
|---|---|---|
| **Q21.** | For what values of k will the following pair of linear equations have infinitely many solutions ?<br>Kx+ 3y–(k–3)=0 and 12x+ky–k=0<br>**OR**<br>If 217x+131y =913, 131x+217y=827, then find the value of x and y. | **2** |
| **Q22.** | Find the value of x if $2\ \text{cosec}^2\ 30^0 + x \sin^2 60^0 - 3/4\ \tan^2 30^0 = 10$ | **2** |
| **Q23.** | In the given figure below, $\frac{AD}{AE} = \frac{AC}{BD}$ and ∠1=∠2. Show that ΔBAE ~ ΔCAD. | **2** |

| | | |
|---|---|---|
| |  | |
| **Q24.** | A circle is inscribed in a ΔABC having AB=10cm, BC=12cm and CA=8cm and touching these sides at D, E, F respectively. Find the lengths of AD, BE and CF.<br>  | **2** |
| **Q25.** | The length of the minute hand of a clock is 14 cm. Find the area swept by the minute hand in 5minutes.<br>**OR**<br>The radii of two circles are 8cm and 6cm respectively. Find the diameter of the circle having area equal to the sum of the areas of the two circles. | **2** |

## SECTION – C
## (Short Answers)

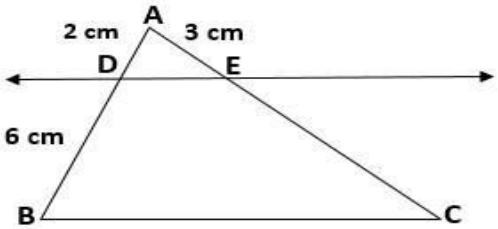
This section comprises of SA of 3 marks each

| Q. No. | Question | Marks |
|---|---|---|
| **Q26.** | Given that √3 isirrational,provethat2+5√3 isirrational. | **3** |
| **Q27.** | Find the zeroes of the quadratic polynomial $6x^2 – 7x – 3$ and verify the relationship between thezeroesandthecoefficients ofthepolynomial. | **3** |
| **Q28.** | Which term of the AP : 3, 15, 27, 39, . . . will be 132 more than its 54th term? | **3** |
| **Q29.** | Prove that<br>$(\text{Sin}A+ \text{Cosec}A)^2 + (\text{Cos}A+\text{Sec}A)^2 = 7+ \tan^2 A + \text{Cot}^2 A$<br><br>**OR** | **3** |

| | | |
|---|---|---|
| | Prove that $\frac{\cos A}{1+sinA} + \frac{1+sinA}{cos\ A}$ = 2 sec A | |
| **Q30.** | All the black face cards are removed from a pack of 52 playing cards. The reaming cards are well shuffled and then a card is drawn at random. Find the probability of getting<br>(i) face card (ii) red card (iii) black card.<br><br>**OR**<br><br>Two coins are tossed simultaneously. What is the probability of getting<br>(i)At least one head? (ii)At most one tail? (iii) A head and a tail? | **3** |
| **Q31.** | Prove that a parallelogram circumscribing a circle is a rhombus. | **3** |

## SECTION – D
## (Long Answers)

This section comprises of LA type questions of 5 marks each

| Q. No. | Question | Marks |
|---|---|---|
| **Q32.** | A man wished to give Rs. 12 to each person and found that he fell short of Rs. 6 when he wanted togive to all the persons present. He, therefore, distributed Rs. 9 to each person and found that Rs. 9 were leftover. How much money did he have and how many persons were there?<br>OR<br>A father's age is three times the sum of the ages of his children. After 5 years, his age will be two times the sum of their ages. Find the present age of the father. | **5** |
| **Q33.** | Prove that a line drawn parallel to one side of a triangle divide other two sides in the same ratio. In the figure, find EC if AD/DB = AE/EC using the above theorem.<br>  <br> | **5** |
| **Q34.** | A tent is in the shape of a cylinder surmounted by a conical top. If the height and diameter of the cylindrical part are 2.1 m and 4 m respectively, and the slant height of the top is 2.8 m, find the area of the canvas used for making the tent. Also,find the cost of the canvas of the tent atthe rateofRs.500perm$^2$.<br>OR<br>A rectangular metal block has length 15 cm, breadth 10 cm and height 5 cm. From | **5** |

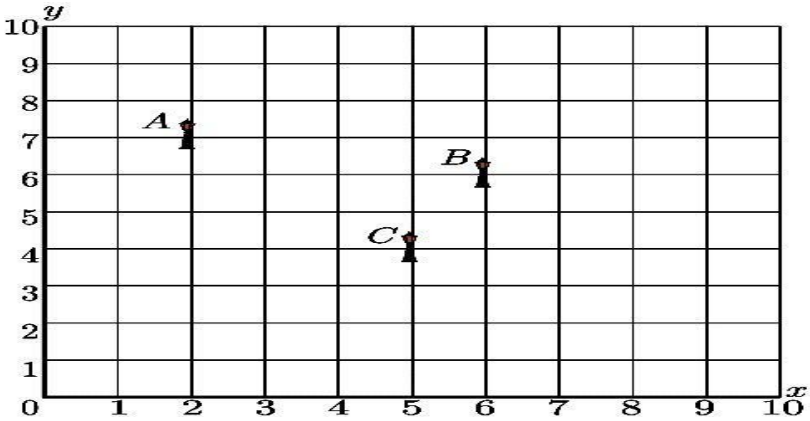
| | | |
|---|---|---|
| | this block, acircular hole of diameter 7 cm is drilled out. Find: (i) the volume of the remaining solid (ii) thesurface areaoftheremainingsolid. | |
| **Q35.** | The distribution below gives the makes of 100 students of a class, if the median makes are 24,find the frequencies $f_1$ and $f_2$ | **5** |

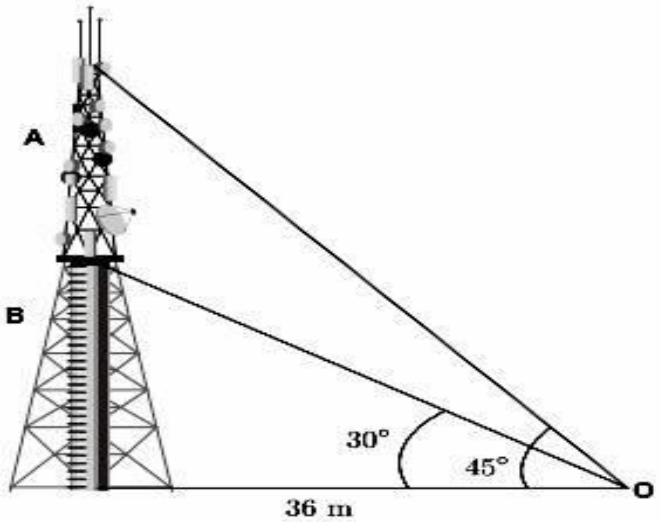
| Marks | **0-5** | **5-10** | **10-15** | **15-20** |
|---|---|---|---|---|
| No.of students | **4** | **6** | **10** | **$f_1$** |
| Marks | **20-25** | **25-30** | **30-35** | **35-40** |
| No.of students | **25** | **$f_2$** | **18** | **5** |

## SECTION - E
## (Case-study Based Questions)

This section comprises of 3 case-study based questions of 4 marks each with three sub-parts.

| Q. No. | Question | Marks |
|---|---|---|
| **Q36.** | . **CASE STUDY -1**<br>In the month of April to June2022, the exports of passenger cars from India increased by 26% in the corresponding quarter of 2021–22, as per a report. A car manufacturing company planned to produce 1800 cars in 4th year and 2600 cars in 8th year. Assuming that the production increases uniformly by a fixed number every year.<br> <br>Basedon theaboveinformationanswerthefollowingquestions.<br>(i) Find the production in the 1st year.<br>(ii) Find the production in the 12th year.<br>(iii) Find the total production in first 10 years.<br>OR | **(1)**<br>**(1)**<br>**(2)**<br><br>**(2)** |

| | | |
|---|---|---|
| | (iii)In how many years will the total production reach 31200 cars? | |
| **Q37.** | **CASE STUDY -2**<br>Resident Welfare Association (RWA) of a Gulmohar Society in Delhi have installed three electric poles A, B and C in a society's common park. Despite these three poles, some parts of the park arestill in dark. So, RWA decides to have one more electric pole D in the park. The park can bemodelledas acoordinatesystems givenbelow.<br>  <br><br>On the basis of the above information, answer the following questions:<br>(i) What is the position of the pole C?<br>(ii) What is the distance of the pole B from the corner O of the park?<br>(iii) Find the position of the fourth pole D so that four points A, B, C and D form a parallelogram.<br>OR<br>(iii)What is the distance between poles A and C? | **(1)**<br>**(1)**<br>**(2)**<br>**(2)** |
| **Q38.** | **CASE STUDY -3**<br>Radio towers are used for transmitting a range of communication services including radio and television. The tower will either act as an antenna itself or support one or more antennas on its structure, including micro wave dishes. They are among the tallest human-made structures. There are 2 main types: guyed and self-supporting structures. On a similar concept, a radio station tower was built in two sections A and B. Tower is supported by wires from a point O. Distance between the base of the tower and point O is 36m. From point O, the angle of elevation of the top of section B is 30° and the angle ofelevation of the top of section A is 45°. | |




(i) What is the height of the section B ? (1)

(ii) What is the height of the section A? (1)

(iii) What is the length of the wire structure from the point O to the top of section A? (2)

(OR) (2)

(iii)What is the length of the wire structure from the point O to the top of section B?

# Pre-board Examination(2025-26)

पूर्व- बोर्ड परीक्षा (2025-26)

## Class: X

## Subject and Subject code: Social Science(087)

कक्षा: X

विषय और विषय कोड: सामाजिक विज्ञान (087)

**Time:03hrs** **Max.marks:80**

समय: 03 घंटे अधिकतम अंक: 80

**General Instructions:**

सामान्य निर्देश:

1. There are 38 questions in the Question paper. All questions are compulsory.

1. प्रश्न पत्र में 38 प्रश्न हैं। सभी प्रश्न अनिवार्य हैं।

2. The question paper has Four Sections - A-History, B-Geography C- Political Science, and D-Economics.

2. प्रश्नपत्र में चार खंड हैं – A: इतिहास, B: भूगोल, C: राजनीति विज्ञान और D: अर्थशास्त्र।

3. Each Section is of 20 Marks and has MCQs, VSA, SA, LAs and CBQ.

3. प्रत्येक खंड 20 अंकों का है और इसमें MCQs, VSA, SA, LA और CBQ प्रश्न शामिल हैं।

4. Very Short Answer Type Questions (VSA), carry 2 marks each. Answers to each question should not exceed 40 words.

4. अति लघु उत्तरीय प्रश्न (VSA) 2 अंकों के होंगे। प्रत्येक उत्तर 40 शब्दों से अधिक नहीं होना चाहिए।

5. Short Answer Type Questions (SA), carry 3 marks each. Answers to each question should not exceed 60 words.

5. लघु उत्तरीय प्रश्न (SA) 3 अंकों के होंगे। प्रत्येक उत्तर 60 शब्दों से अधिक नहीं होना चाहिए।

6. Long answer type questions (LA), carry 5 marks each. Answers to each question should not exceed 120 words.

6. दीर्घ उत्तरीय प्रश्न (LA) 5 अंकों के होंगे। प्रत्येक उत्तर 120 शब्दों से अधिक नहीं होना चाहिए।

7. There are case based questions (CBQ) with three sub questions and are of 4 marks each. Answers to each question should not exceed 100 words.

7. केस आधारित प्रश्न (CBQ) 4 अंकों के होंगे जिनमें तीन उप प्रश्न होंगे। प्रत्येक उत्तर 100 शब्दों से अधिक नहीं होना चाहिए।

8. The map-based questions, carry 5 marks with two parts- Q9. In Section A-History (2 marks) and Q19. In Section B-Geography (3 marks)

8. मानचित्र आधारित प्रश्न 5 अंकों के होंगे जिनमें दो भाग होंगे – प्रश्न 9 (इतिहास खंड – 2 अंक) और प्रश्न 19 (भूगोल खंड – 3 अंक)।

9. There is no overall choice in the question paper. However, an internal choice has been provided in few questions. Only one of the choices in such questions must be attempted.

9. प्रश्न पत्र में कोई समग्र विकल्प नहीं है। हालाँकि, कुछ प्रश्नों में आंतरिक विकल्प दिया गया है। केवल एक विकल्प का प्रयास करना होगा।

10. In addition to this, NOTE that a separate question has been provided for Visually Impaired candidates in lieu of questions having visual inputs, map etc. Such questions are to be attempted by Visually Impaired candidates only.

10. दृष्टि बाधित विद्यार्थियों के लिए विशेष प्रश्न प्रदान किए गए हैं जो दृश्य इनपुट और मानचित्र आदि के स्थान पर दिए गए हैं।

SECTION A

HISTORY(20MARKS)

**खंड – A :**

**इतिहास (20 अंक)**

1 (1)

Study the picture and answer the question that follows:

चित्र का अध्ययन करें और निम्नलिखित प्रश्न का उत्तर दें:

Identify the two leaders with Mahatma Gandhi.

(a) Maulana Azad and Bal Gangadhar Tilak
(b) Nehru and Jinnah
(c) Shaukat Ali and Gopal Krishna Gokhale
(d) Jawaharlal Nehru and Maulana Azad

महात्मा गांधी के साथ दो नेताओं की पहचान करें।

(a) मौलाना आज़ाद और बाल गंगाधर तिलक
(b) नेहरू और जिन्ना
(c) शौकत अली और गोपाल कृष्ण गोखले
(d) जवाहरलाल नेहरू और मौलाना आज़ाद

2 (1)

Under the presidency of Jawaharlal Nehru, the Lahore Congress formalised the demand of "Purna Swaraj" of full independence for India in_____

(a) December 1929 (b) January 1929
(c)December 1930 (d) December 1928

जवाहरलाल नेहरू की अध्यक्षता में लाहौर कांग्रेस ने भारत के लिए पूर्ण स्वतंत्रता की "पूर्णस्वराज" की मांग को औपचारिक रूप कब दिया था?

(a) दिसंबर 1929 (b) जनवरी 1929
(c) दिसंबर 1930 (d) दिसंबर 1928

3 (1)

Arrange the following in the correct sequence.

(i) Unification of Germany (ii) Unification of Italy
(iii)Greek struggle for independence began (iv) Fall of Napoleon

(a) (iv)-(iii)-(ii)-(i) (b) (ii)-(iv)-(iii)-(i)
(c) (iii)-(iv)-(ii)-(i) (d) (i)-(iii)-(ii)-(iv)

निम्नलिखित कोसही क्रम में व्यवस्थित करें।

(i) जर्मनी का एकीकरण (ii) इटली का एकीकरण
(iii) स्वतंत्रता के लिए ग्रीक संघर्ष शुरू हुआ (iv) नेपोलियन का पतन

(a) (iv)-(iii)-(ii)-(i) (b) (ii)-(iv)-(iii)-(i)
(c) (iii)-(iv)-(ii)-(i) (d) (i)-(iii)-(ii)-(iv)

| | | |
|---|---|---|
| 4 | The following questions consist of two statements- Assertion (A) and Reason (R).<br>Answer these questions selecting the appropriate option given below:<br>(a) Both A and R are true and R is the correct explanation of A.<br>(b) Both A and R are true but R is not the correct explanation of A<br>(c) A is correct but R is wrong.<br>(d) A is wrong but R is correct.<br>निम्नलिखित प्रश्नों में दो कथन हैं – अभिकथन (A) और कारण (R)।<br>नीचे दिए गए उचित विकल्प का चयन करके इन प्रश्नों के उत्तर दीजिए:<br>(a) A और R दोनों सत्य हैं और R, A का सही स्पष्टीकरण है।<br>(b) A और R दोनों सत्य हैं लेकिन R, A का सही स्पष्टीकरण नहीं है।<br>(c) A सही है लेकिन R गलत है।<br>(d) A गलत है लेकिन R सही है।<br>Assertion (A): The Printing press came to Goa with French missionaries in the mid-16th century.<br>Reason (R): The Jesuit Priests learnt Konkani and printed several tracts.<br>अभिकथन (A): 16 वीं शताब्दी के मध्य में फ्रांसीसी मिशनरियों के साथ प्रिंटिंग प्रेस गोवा आई थी।<br>कारण (R) :जे सुइट पादरियों ने कोंकणी सीखी और कई ट्रैक्ट छापे। | 1 |
| 5A | Explain how the silk routes are a good example of Pre-modern trade between different countries of the world?<br>रेशम मार्ग किस प्रकार विश्व के विभिन्न देशों के बीच पूर्व-आधुनिक व्यापार का एक अच्छा उदाहरण हैं? व्याख्या करे। | 2 |
| | OR अथवा | |
| 5B | Give two examples of different types of global exchanges which took place before the seventeenth century, choosing one example from Asia and one from the Americas<br>सत्रहवीं शताब्दी से पूर्व हुए विभिन्न प्रकार के वैश्विक आदान-प्रदान के दो उदाहरण दीजिए, जिनमें से एक उदाहरण एशिया से और एक उदाहरण अमेरिका से दिया गया। | |
| 6A | Explain how print culture assisted the growth of nationalism in India.<br>बताएं कि कैसे मुद्रण संस्कृति ने भारत में राष्ट्रवाद के विकास में सहायता की। | 3 |
| | OR अथवा | |
| 6B | Enumerate some drawbacks of manuscripts.<br>पांडुलिपियों की कुछ कमियां गिनाइए। | |
| 7A | How did ideas of national unity in early nineteenth century Europe ally to the ideology of liberalism? Explain.<br>उन्नीसवीं सदी की शुरुआत में यूरोप में राष्ट्रीय एकता के विचार उदारवाद की विचारधारा से कैसे जुड़े? व्याख्या करें। | 5 |
| | OR अथवा | |
| 7B | "In the administrative field Napoleon had incorporated revolutionary principles." Explain the statement. | |

| | | |
|---|---|---|
| | "नेपोलियन ने प्रशासनिक क्षेत्र में क्रांतिकारी सिद्धांतों का समावेश किया था।" कथन की व्याख्या कीजिए। | |
| 8 | **CASE BASED QUESTION**<br>Read the given text and answer the following questions:(1+1+2)<br><br>**Nationalism in India**<br>Modern nationalism in Europe come to be associated with the formation of nation-states. It also meant a change in people's understanding of who they were and what defined their identity and sense of belonging. New symbols and icons, new songs and ideas forged new links and redefined the boundaries of communities. In most countries the making of this new national identity was a long process. How did this consciousness emerge in India?<br><br>In India and as in many other colonies, the growth of modern nationalism is intimately connected to the anti-colonial movement. People began discovering their unity in the process of their struggle with colonialism. The sense of being oppressed under colonialism provided a shared bond that tied many different groups together. But each class and group felt the effects of colonialism differently, their experiences were varied and their notions of freedom were not always the same. The Congress under Mahatma Gandhi tried to forge these groups together within one movement. But the unity did not emerge without conflict.<br><br>Q. 1. What was people's understanding of nation?<br>Q. 2. How was the growth of modern nationalism intimately connected to the anti-colonial movement?<br>Q. 3. How did people in India develop a sense of collective belonging? Explain.<br><br>**केस आधारित प्रश्न:**<br>**भारत में राष्ट्रवाद**<br>यूरोप में आधुनिक राष्ट्रवाद राष्ट्र-राज्यों के निर्माण से जुड़ा हुआ है। इसका मतलब यह भी था कि लोगों की समझ में बदलाव आया कि वे कौन थे और उनकी पहचान और अपनेपन की भावना क्या परिभाषित करती है। नए प्रतीकों और प्रतीकों, नए गीतों और विचारों ने नए संबंध बनाए और समुदायों की सीमाओं को फिर से परिभाषित किया। अधिकांश देशों में इस नई राष्ट्रीय पहचान का निर्माण एक लंबी प्रक्रिया थी।भारत में यह चेतना कैसे उत्पन्न हुई?<br>भारत में और कई अन्य उपनिवेशों की तरह, आधुनिक राष्ट्रवाद का विकास उपनिवेशवाद विरोधी आंदोलन से गहराई से जुड़ा हुआ है। लोगों ने उपनिवेशवाद के साथ अपने संघर्ष की प्रक्रिया में अपनी एकता की खोज शुरू कर दी। उपनिवेशवाद के तहत उत्पीड़ित होने की भावना ने एक साझा बंधन प्रदान किया जिसने कई अलग-अलग समूहों को एक साथ बांध दिया। लेकिन प्रत्येक वर्ग और समूह ने उपनिवेशवाद के प्रभावों को अलग-अलग तरह से महसूस किया, उनके अनुभव अलग-अलग थे और स्वतंत्रता के बारे में उनकी धारणाएँ हमेशा एक जैसी नहीं थीं। महात्मा गांधी के नेतृत्व में कांग्रेस ने इन समूहों को एक आंदोलन के तहत एकजुट करने की कोशिश की। लेकिन एकता संघर्ष के बिना सामने नहीं आई।<br>प्रश्न 1. राष्ट्र के बारे में लोगों की समझ क्या थी?<br>प्रश्न 2. आधुनिक राष्ट्रवाद का विकास उपनिवेशवाद विरोधी आंदोलन से किस प्रकार घनिष्ठ रूप से जुड़ा था? | 4 |

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| | प्रश्न 3. भारत में लोगों में सामूहिक अपनेपन की भावना कैसे विकसित हुई? व्याख्या करना। | |
| | **MAP SKILL BASED QUESTION (2MARKS)**<br>**मानचित्र आधारित प्रश्न (2 अंक):** | |
| 9 | (a) Two places i and ii are marked on the outline political map of India. Identify these places with the help of following information and write their correct names on the lines marked near them.<br>(i) The place where the Indian National Congress was held in 1927.<br>(ii) The place associated with the Jallianwala Bagh Incident.<br>(अ) भारत के रूपरेखा राजनीतिक मानचित्र पर दो स्थान I और II अंकित हैं। निम्नलिखित जानकारी की सहायता से इन स्थानों को पहचानें और उनके पास अंकित रेखाओं पर उनके सही नाम लिखें।<br>(i) वह स्थानजहाँ 1927 में भारतीय राष्ट्रीय कांग्रेस का आयोजन हुआ था।<br>(ii) जलियांवाला बाग कांड से जुड़ा स्थान।<br>Note: The following questions is for **Visually Impaired Candidates** only in lieu of Q.No.9<br>(i) Name the place where the Indian National Congress was held in 1927.<br>(ii)Name the place associated with the Jallianwala Bagh Incident.<br><br>**नोट:**निम्नलिखित प्रश्न केवल **दृष्टिबाधित विद्यार्थियों के लिए** प्रश्न संख्या 9 के स्थान पर है।<br>(i) वह स्थानजहाँ 1927 में भारतीय राष्ट्रीय कांग्रेस का आयोजन हुआ था।<br>(ii) जलियांवाला बाग कांड से जुड़ा स्थान। | 2 |
| | **SECTION B**<br>**GEOGRAPHY (20MARKS)**<br>**खंड – B :**<br>**भूगोल (20 अंक)** | |
| 10 | When was the first international Earth summit held in?<br>(a) 1991 (b) 1990<br>(c) 1992 (d) 1993<br>पहला अंतर्राष्ट्रीय पृथ्वी शिखर सम्मेलन कब आयोजित किया गया था?<br>(a) 1991 (b) 1990<br>(c) 1992 (d) 1993 | 1 |
| 11 | Which of the following conservation strategy do not directly involve community participation?<br>(a) Joint forest management (b) Chipko movement<br>(c) Beej bachao andolan (d) Demarcation of wildlife sancturies<br>निम्नलिखित में से किस संरक्षण रणनीति में सीधे तौर पर सामुदायिक भागीदारी शामिल नहीं है?<br>(a) संयुक्त वन प्रबंधन )b) चिपको आंदोलन<br>(c) बीज बचाओ आंदोलन )d) वन्यजीव अभयारण्यों का सीमांकन | 1 |
| 12 | Choose the correctly matched pair about the main crop growing states of India from the following options:<br>(a) Cotton – Meghalaya (b) Rubber – Kerala<br>(c) Wheat – Uttar Pradesh (d) Both (b) and (c)<br>निम्नलिखित विकल्पों में से भारत के मुख्य फसल उत्पादक राज्यों के बारे में सही मिलान वाली जोड़ी चुनें: | 1 |

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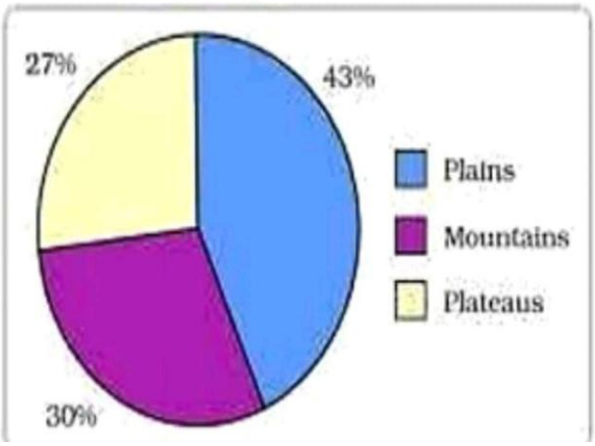
| | (a) कपास – मेघालय (b) रबर – केरला<br>(c) गेहूँ – उत्तरप्रदेश (d) )b) और )c) दोनों | |
| 13 | Interpret the following pie diagram and choose the correct option for the following question?<br>What is the significance of 43 percent land under plains?<br>(A) It provides facilities for agriculture and industry.<br>(B) It provides facilities for tourism.<br>(C) It ensures perennial flow of some river.<br>(D) It possesses rich reserve of minerals, fossil fuels and forests.<br>  <br><br>निम्नलिखित पाई आरेख की व्याख्या कीजिये और निम्नलिखित प्रश्न के लिए सही विकल्प चुनिए?<br>मैदानी इलाकों के तहत 43 प्रतिशत भूमि का क्या महत्व है?<br>A. यह कृषि और उद्योग के लिए सुविधाएँ प्रदान करता है।<br>B. यह पर्यटन के लिए सुविधाएँ प्रदान करता है।<br>C. यह किसी नदी का बारहमासी प्रवाह सुनिश्चित करता है।<br>D. इसमें खनिजों, जीवाश्म ईंधनों और वनों का समृद्ध भंडार है | 1 |
| 14 | Two statements are given below. They are Assertion (A) and Reason (R). Read both the statements and choose the correct option.<br>**Assertion (A):** The famous 'Chipko Movement' in the Himalayas successfully resisted deforestation in several areas.<br>**Reason (R):** Through this, community afforestation campaign with indigenous species was made enormously successful.<br>**Options:**<br>(A) Both (A) and (R) are true, but (R) is not the correct explanation of (A).<br>(B) Both (A) and (R) are true and (R) is the correct explanation of (A).<br>(C) (A) is true, but (R) is false.<br>(D) (A) is false, but (R) is true.<br>नीचे दो कथन दिए गए हैं। वे अभिकथन (A) और कारण (R) हैं। दोनों कथनों को पढ़िए और सही विकल्प का चयन कीजिए।<br>**कथन (A):** हिमालय में प्रसिद्ध 'चिपको आंदोलन' ने कई क्षेत्रों में वनों की कटाई का सफलतापूर्वक विरोध किया।<br>**कारण (R):** इसके माध्यम से, स्वदेशी प्रजातियों के साथ सामुदायिक वनीकरण अभियान को काफी सफल ब<br>**विकल्प:**<br>(A) दोनों (A) और (R) सत्य हैं, लेकिन (R) (A) का सही स्पष्टीकरण नहीं है।<br>(B) दोनों (A) और (R) सत्य हैं और (R) (A) का सही स्पष्टीकरण है।<br>(C) (A) सत्य है, लेकिन (R) गलत है।<br>(D) (A) गलत है, लेकिन (R) सत्य है। | 1 |

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| 15 | Conservation of forest is a key to the survival of human mankind. Some of the practices undertaken in India in this direction is Joint Forest Management. Identify the correct information related to Joint Forest Management.<br>1. It involves local communities in the management and restoration of degraded forests.<br>2. The programme has been in formal existence since 1980.<br>3. Jharkhand passed the first resolution for Joint Forest Management.<br>4. The members of local village communities are entitled to intermediary benefits like non timber forest producers.<br>**Options:**<br>(A) 1 and 2 only<br>(B) 2 and 3 only<br>(C) 1 and 4 only<br>(D) 3 and 4 only<br>वन का संरक्षण मानव जाति के अस्तित्व की कुंजी है। इस दिशा में भारत में की गई कुछ पद्धतियाँ संयुक्त वन प्रबंधन हैं। संयुक्त वन प्रबंधन से संबंधित सही जानकारी की पहचान करें।<br>1. यह स्थानीय समुदायों को निम्नीकृत वनों के प्रबंधन और बहाली में शामिल करता है।<br>2. यह कार्यक्रम 1980 से औपचारिक अस्तित्व में है।<br>3. झारखंड ने संयुक्त वन प्रबंधन के लिए पहला प्रस्ताव पारित किया।<br>4. स्थानीय ग्राम समुदायों के सदस्य गैर लकड़ी वन उत्पादकों की तरह मध्यस्थ लाभ के हकदार हैं।<br>**विकल्प:**<br>(A) केवल 1 और 2<br>(B) केवल 2 और 3<br>(C) केवल 1 और 4<br>(D) केवल 3 और 4 | 1 |
| 16 | Name one important beverage crop and specify the geographical conditions required for its growth.<br>एक महत्वपूर्ण पेय फसल का नाम बताइए और इसकी वृद्धि के लिए आवश्यक भौगोलिक परिस्थितियों को स्पष्ट कीजिए | 2 |
| 17A | Describe the importance of manufacturing industries as a backbone of economic development of the country.<br>देश के आर्थिक विकास की रीढ़ के रूप में विनिर्माण उद्योगों के महत्त्व को स्पष्ट कीजिए। | 5 |
| | OR अथवा | |
| 17B | Discuss the steps to be taken to minimise environmental degradation by industries.<br>उद्योगों द्वारा पर्यावरण क्षरण को कम करने के लिए उठाए जाने वाले कदमों की विवेचना कीजिए। | |

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| 18 | **CASE BASED QUESTION**<br>Read the given text and answer the following questions: (1+1+2)<br><br>**RAINWATER HARVESTING**<br>Many thought that given the disadvantages and rising resistance against the multi-purpose projects, water harvesting system was a viable alternative, both socio-economically and environmentally. In ancient India, along with the sophisticated hydraulic structures, there existed an extraordinary tradition of water harvesting system. People had in-depth knowledge of rainfall regimes and soil types and developed wide ranging techniques to harvest rainwater, groundwater, river water and flood water in keeping with the local ecological conditions and their water needs. In hill and mountainous regions, people built diversion channels like the 'guls' or 'kuls' of the Western Himalayas for agriculture. 'Rooftop rainwater harvesting' was commonly practised to store drinking water, particularly in Rajasthan. In the flood plains of Bengal, people developed inundation channels to irrigate their fields. In arid and semi-arid regions, agricultural fields were converted into rain fed storage structures that allowed the water to stand and moisten the soil like the 'Khadins' in Jaisalmer and 'Johads' in other parts of Rajasthan.<br><br>Q. 1. Why is water harvesting system a viable alternative?<br>Q. 2. Describe the process of 'rooftop rainwater harvesting'?<br>Q. 3. Mention any two methods adopted by ancient India for water conservation.<br><br>**जलसंरक्षण**<br>कई लोगों ने सोचा कि बहु उद्देश्यीय परियोजनाओं के नुकसान और उनके खिलाफ बढ़ते प्रतिरोध को देखते हुए,जलसंचयन प्रणाली सामाजिक-आर्थिक और पर्यावरणीय दोनों ही दृष्टि से एक व्यवहार्य विकल्प है।प्राचीन भारत में,परिष्कृत हाइड्रोलिक संरचनाओं के साथ-साथ, जलसंचयन प्रणाली की एक असाधारण परं परामौजूद थी। लोगों को वर्षा व्यवस्था और मिट्टी के प्रकारों का गहन ज्ञान था और उन्होंने स्थानीय पारिस्थितिक स्थितियों और उनकी जल आवश्यकताओं को ध्यान में रखते हुए वर्षा जल, भूजल, नदी जल और बाढ़ जलसंचयन के लिए व्यापक तकनीकें विकसित कीं। पहाड़ी और पर्वतीय क्षेत्रों में, लोगों ने कृषि के लिए पश्चिमी हिमालय के 'गुल' या 'कुल' जैसे डायवर्जन चैनल बनाए। विशेषकर राजस्थान में पीने के पानी को संग्रहित करने के लिए आमतौर पर 'छत पर वर्षा जलसंचयन' का अभ्यास किया जाता था। बंगाल के बाढ़ के मैदानों में, लोगों ने अपने खेतों की सिंचाई के लिए जल प्लावन चैनल विकसित किए। शुष्क और अर्ध-शुष्क क्षेत्रों में, कृषि क्षेत्रों को वर्षा आधारित भंडारण संरचनाओं में परिवर्तित कर दिया गया, जिससे पानी जमा हो सके और मिट्टी को नम किया जा सके, जैसे जैसलमेर में 'खडीन' और राजस्थान के अन्य हिस्सों में 'जोहड़'।<br><br>प्रश्न 1. जलसंचयन प्रणाली एक व्यवहार्य विकल्प क्यों है?<br>प्रश्न 2. 'छत पर वर्षा जलसंचयन' की प्रक्रिया का वर्णन करें?<br>प्रश्न 3. जलसंरक्षण के लिए प्राचीन भारत द्वारा अपनाई गई किन्हीं दो विधियों का उल्लेख करें। | 4 |
| | **MAP SKILL BASED QUESTIONS (3 MARKS)**<br>**मानचित्र कौशल आधारित प्रश्न (3 अंक)** | |
| 19 | On the same outline map of India locate and label the following with suitable symbols: | 3 |

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| | (i) Salal Dam.<br>(ii) Bhilai –Iron and steel Plant.<br>(iii)Neta ji subhashchandrabose International airport<br>भारत के दिए गए रूपरेखा मानचित्र पर निम्नलिखित को दर्शाएँ।<br>(i) सलाल बांध।<br>(ii) भिलाई-लोहा और इस्पात संयंत्र।<br>(iii)नेताजी सुभाष चंद्रबोस अंतर्राष्ट्रीय हवाईअड्डा<br><br>Note: The following questions is for **Visually Impaired Candidates** only in lieu of Q.No.9<br>(i) Name the place where Salal Dam is situated<br>(ii)Name the place where Bhilai – Iron and steel Plant.is situated<br>(iii)Name the place where Neta ji subhashchandrabose International airport<br>**नोट:**निम्नलिखित प्रश्न केवल **दृष्टिबाधित विद्यार्थियों के लिए** प्रश्न संख्या 9 के स्थान पर है।<br>i) वह स्थान जहाँ सलाल बांध स्थित है ।<br>ii) भिलाई - लोहा और इस्पात संयंत्र। से जुड़ा स्थान।<br>iii)वह स्थान जहाँ नेताजी सुभाष चंद्रबोस अंतर्राष्ट्रीय हवाईअड्डा स्थित है | |
| | **SECTION C**<br>**POLITICAL SCIENCE (20 MARKS)**<br>**खंड C**<br>**राजनीति विज्ञान (20 अंक)** | |
| 20 | Under which of the following is power shared in the 'community government' of Belgium?<br>(a) Different social groups (b)Different organs of Government<br>(c) Central and State Government (d) State and Community government<br>बेल्जियम की 'सामुदायिकसरकार' में सत्ता का बंटवारा निम्नलिखित में से किस के द्वारा किया जाता है?<br>(a) विभिन्न सामाजिक समूह (b) सरकार के विभिन्न अंग<br>(c) केंद्र और राज्य सरकार (d) राज्य और सामुदायिक सरकार | 1 |
| 21 | Which linguistic group was in majority in the capital city of Belgium brussels?<br>(a) Dutch (b) French (c) German (d) Spanish<br>बेल्जियम की राजधानी ब्रुसेल्स में कौन सा भाषाई समूह बहुसंख्यक था?<br>(a) डच ) b) फ्रेंच (c) जर्मन ) d) स्पेनिश | 1 |
| 22 | When power is taken away from Central and State government and given to local government, it is called:<br>(a) Centralisation (b) Decentralisation (c) Panchayat Samiti (d) None of these<br>जब केंद्र और राज्य सरकार से शक्ति छीनकर स्थानीय सरकार को दे दी जाती है, तो उसे कहते हैं:<br>(a) केंद्रीकरण (b) विकेंद्रीकरण (c) पंचायत समिति (d) इनमें से कोई नहीं | 1 |
| 23 | Which among the following statements about India's constitution is wrong? It<br>(a) Prohibits discrimination on grounds of religion.<br>(b) Gives official status to one religion.<br>(c) Provides to all individuals freedom to profess any religion. | 1 |

| | | |
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| | (d) Ensures equalities of citizens within religious communities.<br>भारत के संविधान के बारे में निम्नलिखित में से कौन सा कथन गलत है? यह<br>(a) धर्म के आधार पर भेदभाव को रोकता है।<br>(b) एक धर्म को आधिकारिक दर्जा देता है।<br>(c) सभी व्यक्तियों को किसी भी धर्म को मानने की स्वतंत्रता प्रदान करता है।<br>(d) धार्मिक समुदायों के भीतर नागरिकों की समानता सुनिश्चित करता है। | |
| 24 | Define "coming together federalism"?<br>"कमिंग टुगेद रफेडरेलिस्म) संघवाद "(को परिभाषित कीजिये | 2 |
| 25 | Explain the main reason for the alienation of Tamils in Sri Lanka.<br>श्रीलंका में तमिलों के अलगाव का मुख्य कारण बताइये। | 2 |
| 26 | Describe the three-fold distribution of legislative powers between the Union Government and state government.<br>केंद्र सरकार और राज्य सरकार के बीच विधायी शक्तियों के त्रिविध वितरण का वर्णन करें। | 3 |
| 27A | Explain the role of political parties in a democracy.<br>लोकतंत्र में राजनीतिक दलों की भूमिका स्पष्ट करें। | 5 |
| | OR अथवा | |
| 27B | "Political parties today face several challenges that impact the democratic functioning." Justify this statement.<br><br>"राजनीतिक दलों को आज कई चुनौतियों का सामना करना पड़ता है जो लोकतांत्रिक कामकाज को प्रभावित करती हैं।" इस कथन का औचित्य सिद्ध कीजिए। | |
| 28 | **CASE BASED QUESTION**<br>Read the given text and answer the following questions.(1+2+1)<br><br>Two different sets of reasons can be given in favour of power sharing. Let us call the first set of reasons prudential and the second moral. While prudential reasons stress that power sharing will bring out better outcomes, moral reasons emphasizes the very act of power sharing as valuable.<br>28.1Why power sharing is essential for democracy? 1<br>28.2 Differentiate between Community government in Belgium and Majoritarian government in Srilanka. 2<br>28.3 What is the moral reason for Power sharing. 1<br>**केस आधारित प्रश्न**<br>**दिए गए पाठ को पढ़ें और निम्नलिखित प्रश्नों के उत्तर दें: (1+2+1)**<br>"सत्ता के बंटवारे के पक्ष में दो अलग-अलग तरह के कारण दिए जा सकते हैं। चलिए पहले समूह के कारणों को युक्तिपरक और दूसरे को नैतिक कहते हैं। जहाँ युक्तिपरक कारण इस बात पर जोर देते हैं कि सत्ता के बंटवारे से बेहतर परिणाम मिलेंगे, वहीं नैतिक कारण सत्ता के बंटवारे के कार्य को ही मूल्यवान मानते हैं।"<br>28.1 लोकतंत्र के लिए सत्ता का बंटवारा क्यों आवश्यक है? (1)<br>28.2 बेल्जियम में सामुदायिक सरकार और श्रीलंका में बहुसंख्यकवादी सरकार के बीच अंतर स्पष्ट | 4 |

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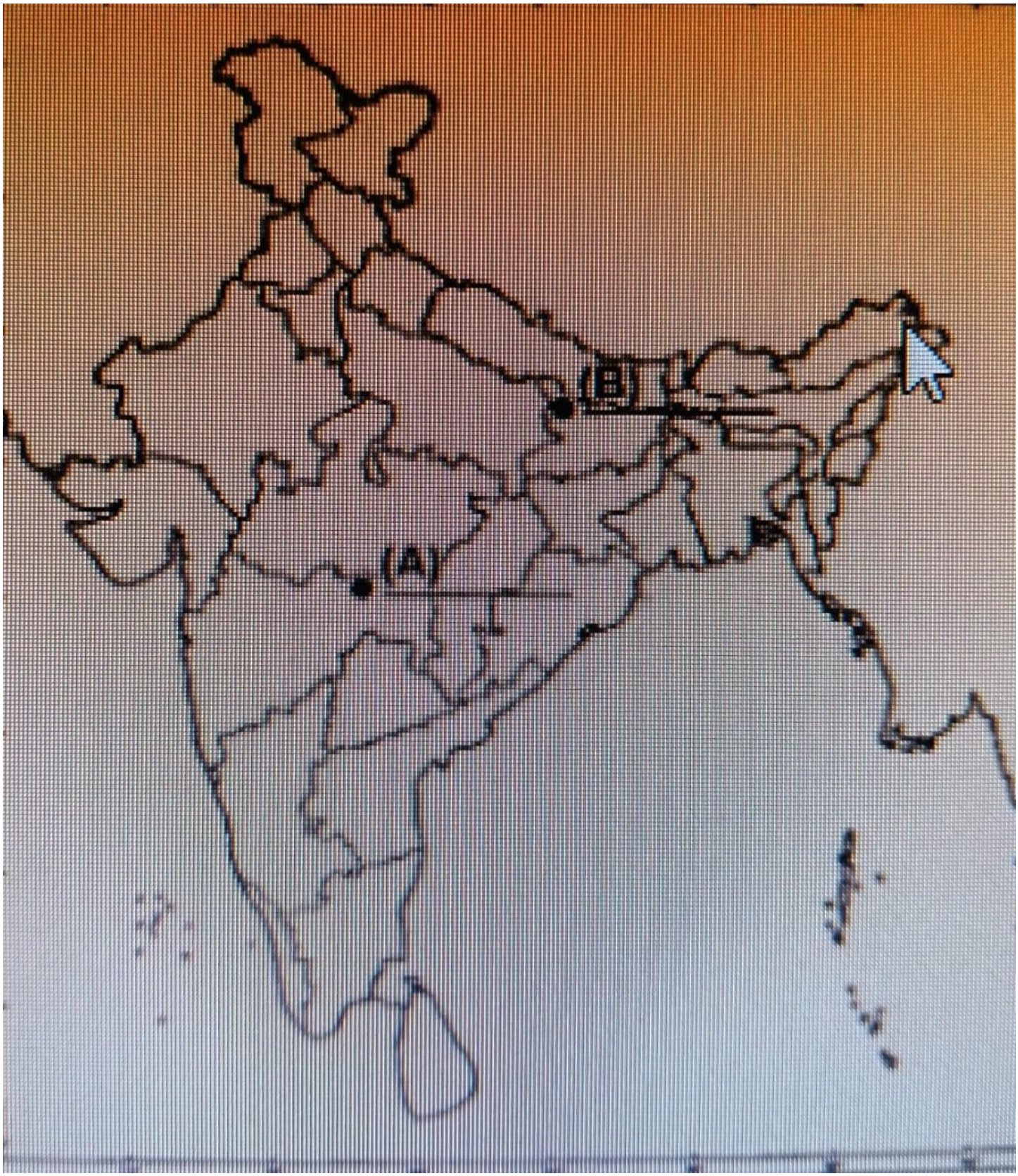
| | कीजिए। (2)<br>28.3 सत्ता के बंटवारे का नैतिक कारण क्या है? (1) | |
| | **SECTION – D**<br>**ECONOMICS (20 MARKS)**<br>**खंड D**<br>**अर्थशास्त्र (20 अंक)** | |
| 29 | Employment figures of a country are based on data collected from 5-yearly surveys on employment and unemployment. Which organization conducts this survey?<br>(a) NSSO - National Sample Survey Organization.<br>(b) NREGA 2005- National Rural Employment Guarantee Act,2005<br>(c) ILO – International Labour Organization<br>(d) Census of India<br>किसी देश के रोजगार के आंकड़े रोजगार और बेरोजगारी पर 5-वर्षीय सर्वेक्षणों से एकत्र आंकड़ों पर आधारित होते हैं। कौन सा संगठन यह सर्वेक्षण करता है?<br>(a) NSSO – राष्ट्रीय नमूना सर्वेक्षण संगठन।<br>(b) नरेगा 2005- राष्ट्रीय ग्रामीण रोजगार गारंटी अधिनियम, 2005<br>(c) ILO – अंतर्राष्ट्रीय श्रम संगठन<br>(d) भारत की जनगणना। | 1 |
| 30 | Which of the following is an example of Collateral?<br>(a) Livestocks (b) Land (c)Deposits with bank (d) All of these<br>निम्नलिखित में से कौन सा संपार्श्विक का उदाहरण है?<br>(a) पशुधन (b) भूमि (c) बैंकमेंजमा (d) येसभी | 1 |
| 31 | The most common route for investments by MNCs in countries around the world is to:<br>(a) By making close relations with local companies.<br>(b) Buy existing local companies.<br>(c) Form partnerships with local companies.<br>(d) All of these.<br>दुनियाभर के देशों में बहुराष्ट्रीय कंपनियों द्वारा निवेश के लिए सबसे आम तरीका है:<br>(क) स्थानीय कंपनियों के साथ नजदीकी संबंध बना कर।<br>(ख) मौजूदा स्थानीय कंपनियों को खरीदना।<br>(ग) स्थानीय कंपनियों के साथ साझेदारी बनाना।<br>(घ) उपरोक्त सभी।. | 1 |
| 32 | An agreement in which the lender supplies the borrower with money goods or services in return for the promise of further payment refers to:<br>(a) Credit (b) Deposit (c)Account (d) Collateral<br>एक समझौता जिसमें ऋणदाता उधारकर्ता को आगे भुगतान के वादे के बदले में धन, सामानया सेवाएं प्रदान करता है, वह निम्न को संदर्भित करता है:<br>(a) ऋण (b) जमा (c) खाता (d) संपार्श्विक | 1 |
| 33 | Study the given picture. The work done in the picture comes under which one of the following sectors of the economy?<br>(A) Primary (B) Secondary (C) Tertiary (D) Quaternary | 1 |

| | | |
|---|---|---|
| | निम्नलिखित चित्र का अध्ययन करें। चित्र में किया गया कार्य अर्थव्यवस्था के निम्नलिखित क्षेत्रों में से किसके अंतर्गत आता है?<br>(A) प्राथमिक (B) द्वितीयक (C) तृतीयक (D) चतुर्थातुक<br> | |
| 34 | Which of the following is an example of Trade Barrier?<br>(a) Tax on imports (b) Custom duty (c)Transit Permits (d) All of these<br>निम्नलिखित में से कौन सा व्यापार अवरोध का उदाहरण है?<br>(a) आयात पर कर (b) सीमा शुल्क (c) पारगमन परमिट (d) उपरोक्त सभी | 1 |
| 35 | Explain the meaning of H.D.I. Explain three components of measuring H.D.I.<br>H.D.I. का अर्थ स्पष्ट करें। H.D.I. मापने के तीन घटकों की व्याख्या करें। | 3 |
| 36 | "There is a need for protection and support for the workers in the unorganised sector." Evaluate this statement.<br>असंगठित क्षेत्र के श्रमिकों के लिए सुरक्षा और समर्थन की आवश्यकता है।"इस कथन का मूल्यांकन करें। | 3 |
| 37 | Why do you think MGNREGA 2005 is referred to as 'Right to Work'?<br>मनरेगा 2005 को 'काम का अधिकार' क्यों कहा जाता है? | 3 |
| 38A | What is the basic idea behind the Self-Help Groups (SHGs) for the poor? Explain in your own words.<br>गरीबों के लिए स्वयं सहायता समूहों (SHG) के पीछे मूल विचार क्या है? अपने शब्दों में समझाइए। | 5 |
| | OR अथवा | |
| 38B | Saroj works in an office. Suman is her house help. State any five points of difference in the working conditions of Saroj and Suman.<br>सरोज एक कार्यालय में काम करती है। सुमन उसकी घरेलू सहायिका है। सरोज और सुमन की काम करने की स्थितियों में कोई पांच अंतर बताइए। | |

**Map for Question No. 9 (Section A) and Question No. 19 (Section B)**

**प्रश्न संख्या 9( खंड ए) और प्रश्न संख्या 19 ( खंड बी) के लिए मानचित्र**


(B)
(A)

**PRE-BOARD EXAMINATION (2025-26)**
**CLASS - X**
**MATHEMATICS (BASIC) – Code No. 241 (SET- 4)**

**Maximum marks:80 Time:3 hours**

**General Instructions: -**
**Read the following instructions carefully and follow them: -**

1. **This question paper contains 38 questions. All Questions are compulsory.**
**2. This Question Paper is divided into 5 Sections A, B, C, D and E.**
**3. In Section A, Question numbers 1-18 are multiple choice questions (MCQs) and question no.19 and 20 are Assertion- Reason based questions of 1 mark each.**
**4. In Section B, Question numbers 21-25 are very short answer (VSA) type questions, carrying 02 marks each.**
**5. In Section C, Question numbers 26-31 are short answer (SA) type questions, carrying 03 marks each.**
**6. In Section D, Question numbers 32-35 are long answer (LA) type questions, carrying 05 marks each.**
**7. In Section E, Question numbers 36-38 are case study-based questions carrying 4 marks each with sub parts of the values of 1, 1 and 2 marks each respectively.**
**8. There is no overall choice. However, an internal choice in 2 questions of Section B, 2 questions of Section C and 2 questions of Section D has been provided. An internal choice has been provided in all the 2 marks questions of Section E.**
**9. Draw neat and clean figures wherever required. Take $\pi$ = 227 wherever required if not stated.**
**10. Use of calculators is not allowed.**

| **SECTION – A**<br>**(Multiple Choice Questions)**<br>Each MCQ of 1mark, has four options with only one correct option, choose the correct option | | |
|---|---|---|
| **Q.No.** | **Question** | **Marks** |
| **Q1.** | Let E be an event such that P (notE) = $\frac{1}{5}$, then P(E) is equal to:<br>A) $\frac{1}{5}$ B) 1 C) 0 D) $\frac{4}{5}$ | **1** |
| **Q2.** | If $p(x) = x^2+5x+6$, then $p(-2)$ is:<br>A)20 B)0 C)-8 D)8 | **1** |
| **Q3.** | The mode of the numbers 2,3,3,4,5,4,4,5,3,4,2,6,7 is:<br>A)2 B)3 C)4 D) 5 | **1** |
| **Q4.** | How many tangents can be drawn to a circle from a point on it ?<br>A)One B)Two C)Infinite D)Zero | **1** |
| **Q5.** | A quadratic equation whose one root is 2 and the sum of whose roots is zero, is :<br>A) $x^2+4 = 0$ B) $x^2-2 = 0$ C) $4x^2-1 = 0$ D) $x^2- 4=0$ | **1** |

| | | |
|---|---|---|
| **Q6.** | Which one of the following is not a quadratic equation<br>A) $(x + 2)^2 = 2(x + 3)$ B). $x^2 + 3x = (-1)(1 - 3x)^2$<br>C) $(x + 2)(x - 1) = x^2 - 2x - 3$ D) $x^3 - x^2 + 2x + 1 = (x + 1)^3$ | **1** |
| **Q7.** | A quadratic polynomial whose sum and product of zeroes are 2and-1 respectively is :<br>A) $x^2+2x+1$ B)$x^2-2x-1$ C)$x^2+2x-1$ D)$x^2-2x+1$ | **1** |
| **Q8.** | (HCF×LCM) for the numbers 30 and 70 is:<br>A)2100 B) 21 C)210 D)70 | **1** |
| **Q9.** | The length of the arc of a circle of the radius 14 cm which subtends an angles of $60^0$ at the centre of the circle is<br>A) 44/3 cm B) 88/3 cm C) 308/3 cm D) 616/3 cm | **1** |
| **Q10.** | If the radius of a semi-circular protractor is7cm,then its perimeter is:<br>A)11cm B)14cm C)22cm D)36cm | **1** |
| **Q11.** | The angle of elevation of the top of a 15m high tower at a point $15\sqrt{3}$m away from the base of the tower is:<br>A) $30^0$ B) $45^0$ C) $60^0$ D) $90^0$ | **1** |
| **Q12.** | If in $\Delta ABC$, $\angle C = 90°$, then sin (A + B) =<br>A) 0 B) ½ C) $1/\sqrt{2}$ D) 1 | **1** |
| **Q13.** | A bag has 3 red balls and 5 green balls. If we take a ball from the bag, then what is the probability of getting a red ball?<br>A) 3 /5 B) 5/8 C) 3/8 D) 8/3 | **1** |
| **Q14.** | If two positive integers A and B can be ex-pressed as $A = xy^3$ and $B = x^4y^2z$; x, y being prime numbers, the LCM (A, B) is<br>A) $xy^2$ B) $x^4y^2z$ C) $x^4y^3$ D) $x^4y^3z$ | **1** |
| **Q15.** | The lines represented by the given equations 4x+2y=16 and 3x - y = 8 are :<br>A) Parallel B) Intersecting C) Coincident D) Perpendicular | **1** |
| **Q16.** | If $\Delta ABC \sim \Delta DEF$ and $\angle A=47^0$,$\angle E=83^0$,then $\angle C$ is equal:<br>A)$47^0$ B)$50^0$ C)$83^0$ D)$130^0$ | **1** |
| **Q17.** | PQ and PR are the two tangents to a circle of centre O at the points Q and R on the circle if $\angle QPR = 40^0$ ,then $\angle QRO$ is<br>A) $10^0$ B) $20^0$ C) $40^0$ D) $140^0$ | **1** |
| **Q18.** | If a pair of linear equations is consistent, then the lines will be<br>A) always coincident B) parallel<br>C) always intersecting D) intersecting or coincident | **1** |

**Each of the following questions contains two statements i.e., ASSERTION and REASON, and has following four choices.**

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

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

C) Assertion (A) is true but reason (R) is false.

D) Assertion (A) is false but reason (R) is true.

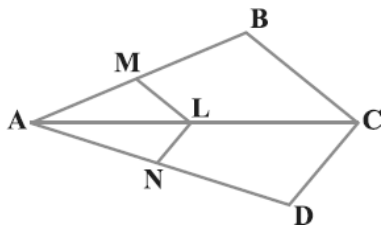
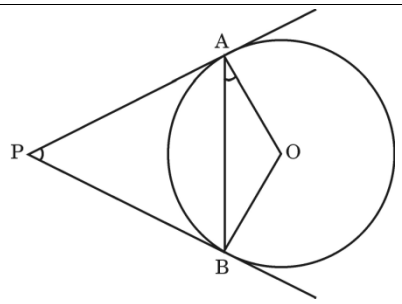
**Only one of which is the correct answer.**

| | | |
|---|---|---|
| **Q19.** | **ASSERTION (A):** If one root of the quadratic equation $4x^2$-10$x$ + (k-4)=0 is reciprocal of the other, then value of k is 8.<br>**REASON (R):** Roots of the quadratic equation $x^2$- $x$+1=0 are real. | **1** |
| **Q20.** | **ASSERTION (A):** A tangent to a circle is perpendicular to the radius through the point of contact.<br>**REASON (R):**The lengths of tangents drawn from an external point to acircle are equal**.** | **1** |

**SECTION – B**

**(Very Short Answers)**

This section comprises of VSA of 2 marks each

| **Q. No.** | **Question** | **Marks** |
|---|---|---|
| **Q21.** | (A) Find the discriminant of the quadratic equation $3x^2$ - 2$x$ + 1/3 = 0 and hence find the nature of its roots.<br>**OR**<br>(B) Find the roots of the quadratic equation $x^2$+$x$- 2 = 0. | **2** |
| **Q22.** | In the given figure, if LM ‖ CB and LN ‖ CD, provethat : $AM/AB = AN/AD$<br>  <br> | **2** |
| **Q23.** | If cos (A + B) = 0 and sin (A – B) = $\sqrt{3}/2$, then find the value of A and B where A and B are acute angles. | **2** |
| **Q24.** | A) Find the coordinates of the point which divides the join of A(-1,7) and B(4,-3) in the ratio2:3.<br>**OR**<br>B)Show that the points (-2, 3), (8, 3) and (6, 7) are the vertices of a right-angled triangle. | **2** |
| **Q25.** | PA and PB are tangents drawn to the circle with centre O as shown in the figure.<br>Prove that ∠APB = 2 ∠OAB.<br>  <br> | **2** |

| SECTION – C<br>(Short Answers)<br>This section comprises of SA of 3 marks each | | |
|---|---|---|
| **Q. No.** | **Question** | **Marks** |
| **Q26.** | Find the area of the sector of a circle of radius 7cm and of central angle $90^o$. Also, find the area of corresponding major sector. | **3** |
| **Q27.** | If α, β are zeroes of the quadratic polynomial $x^2 - 5x+6$, form another quadratic polynomial whose zeroes are 1/ α , 1/β. | **3** |
| **Q28.** | A die is rolled once. Find the probability of getting:<br>(i) An even prime number.<br>(ii) A number greater than 4.<br>(iii) An odd number. | **3** |
| **Q29.** | Prove that : $\frac{1+\tan^2 A}{1+\cot^2 A} = \left(\frac{1-\tan A}{1-\cot A}\right)^2 = \tan^2 A$ | **3** |
| **Q30.** | (A) Two concentric circles with centre O are of radii 3 cm and 5 cm. Find the length of chord AB of thelargercirclewhichtouchesthesmallercircle atP.<br>**OR**<br>(B) Prove that the lengths of tangents drawn from an external point to a circle are equal. | **3** |
| **Q31.** | (A) If we add 1 to the numerator and subtract 1 from the denominator, a fraction reduces to 1. It becomes 1/2 if we only add 1 to the denominator. What is the fraction?<br>**OR**<br>(B) For which value of'*k*'will the following pair of line are quations have no solution ?<br>$3x + y = 1$<br>$(2k- 1)x + (k-1)y = 2k+1$ | |

| SECTION – D<br>(Long Answers)<br>This section comprises of LA type questions of 5 marks each | | |
|---|---|---|
| **Q. No.** | **Question** | **Marks** |
| **Q32.** | The distribution below gives the weights of 30 students of a class. Find the median weight of the students : | **5** |

| Weight In kg | 40-45 | 45-50 | 50-55 | 55-60 | 60-65 | 65-70 | 70-75 |
|---|---|---|---|---|---|---|---|
| Number of Students | 2 | 3 | 8 | 6 | 6 | 3 | 2 |

| | | |
|---|---|---|
| **Q33.** | Find the sum of first 51 terms of an A.P. whose second and third terms are 14 and 18, respectively. | **5** |

| | | |
|---|---|---|
| | **OR**<br>The first term of an A.P. is 5, the last term is 45 and the sum is 400. Find the number of terms and the common difference. | |
| **Q34.** | A tent is in the shape of a cylinder surmounted by a conical top. If the height and diameter of the cylindrical part are 2.1 m and 4 m respectively, and the slant height of the top is 2.8 m, find the area of the canvas used for making the tent. Also, find the cost of the canvas of the tent at the rate of Rs. 500 per $m^2$. (Note that the base of the tent will not be covered with canvas.) | **5** |
| **Q35.** | Fromthe top of a 7 mhigh building, the angle of elevation of the top of a cable tower is $60^0$ and the angle of depression of its foot is $45^0$. Determine the height of the tower.<br>**OR**<br>From the top of a building 50 m high, the angles of depression of the top and bottom of a tower are observed to be $30^0$and $60^0$. Find the height of thetoweranddistancebetweenthebuildingandthetower.<br>(Take $\sqrt{3}$ = 1·73) | **5** |

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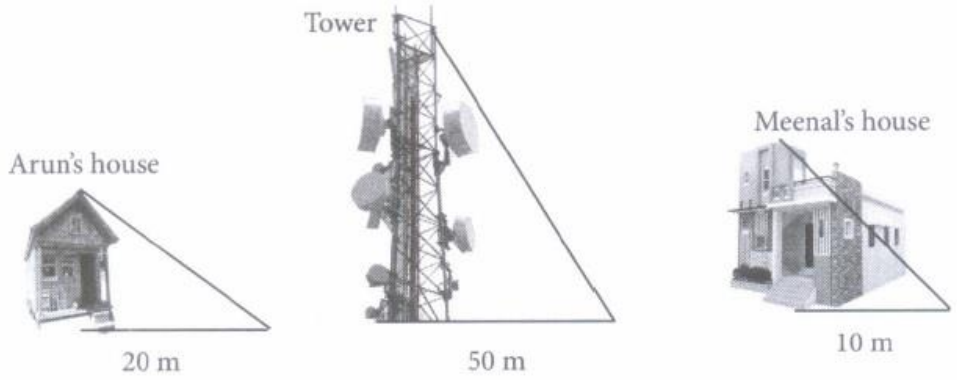
| **SECTION - E**<br>**(Case-study Based Questions)**<br>This section comprises of 3 case-study based questions of 4 marks each with three sub-parts. | | |
| **Q. No.** | **Question** | **Marks** |
| **Q36.** | Meenal was trying to find the height of tower near his house. She is using the properties of similar triangles. The height of Meenal's house is 20 m. When Meenal's house casts a shadow of 10m long on the ground, at the same time, tower casts a shadow of 50 m long and Arun's house casts a shadow of 20 m long on the ground as shown below.<br>  <br><br>Based on the above information, answer the following questions.<br>(i) What is the height of tower?<br>(ii) What will be the length of shadow of tower when Meenal's house casts a shadow of 15 m?<br>(iii) (a) If tower casts a shadow of 40 m, then find the length of shadow of Arun's house. | **(1+1+2)** |

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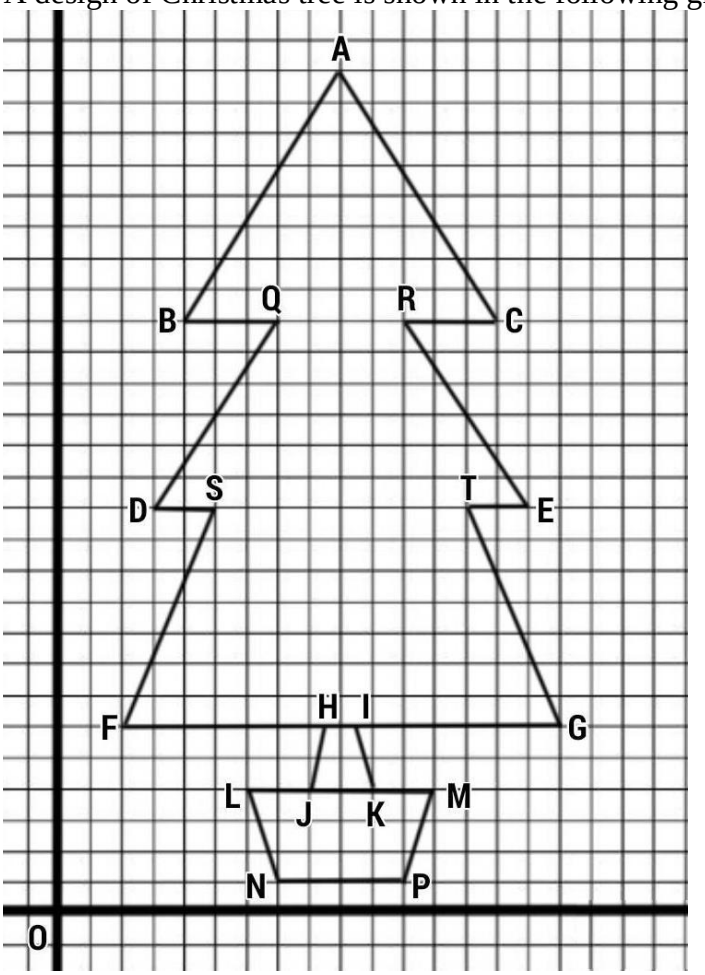
| | **OR**<br>(b) If tower casts a shadow of 40 m, then what will be the length of shadow of Meenal's house? | |
| **Q37.** | A design of Christmas tree is shown in the following graph:<br>  <br><br>Now answer the following questions:<br>(i) What are the coordinates of the pointG .<br>(ii) Find the mid-point of AB.<br>(iii) (a) Find the length of FS.<br>**OR**<br>(b) Find the distance between N and M . | **(1+1+2)** |
| **Q38.** | Khushi wants to organize her birthday party. Being health conscious, she decided to serve only fruits in her birthday party. She bought 36 apples and 60 bananas and decided to distribute fruits equally among all. | **(1+1+2)** |

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| | <br>Based on the above information, answer the following questions :<br>(i) How many guests Khushi can invite at the most ?<br>(ii) How many apples and bananas will each guest get ?<br>(iii) (a) If Khushi decides to add 42 mangoes, how many guests Khushi caninvite at the most ?<br>**OR**<br>If Khushi decides to add 42 mangoes, how manyapples, mangoes and bananas will each guest get ? | |