WINTER
BREAK
ASSIGNMENT
CLASS-X

WINTER BREAK: DECEMBER 31, 2025 TO JANUARY 15, 2026

THE SCHOOL REOPENS ON JANUARY 16 , 2026.

SECTOR-15, PANCHKULA (+91 98888-15111)
www.hallmarkpublicschool.com

ENGLISH

SECTION-A (READING SKILLS)

Q.1   R ead the following text. 10

1.   The increasing focus on digital citizenship has become essential in our interconnected world, where online interactions are as common as real-life ones. This concept refers to the responsible, ethical, and safe use of technology, encompassing awareness of rights and responsibilities in the digital realm. As more aspects of daily life move online, understanding digital citizenship is crucial for navigating the internet positively and safely.

2.   Firstly, effective digital citizenship involves practicing digital literacy. This means not only knowing how to operate devices and software but also understanding how to find, evaluate, and create information online. Discerning reliable sources from misin formation, understanding data privacy settings, and recognizing online scams are all vital skills for navigating the vast digital landscape critically and intelligently.

3.   Another key aspect is practicing digital etiquette. Just as in face-to-face interactions, appropriate behaviour and respectful communication are paramount online. This includes avoiding cyberbullying, refraining from sharing private information without consent, and engaging in constructive dialogue. Respecting intellectual property, such as copyright, also falls under this category, ensuring fair and ethical online conduct.

4.   Furthermore, protecting one's digital security is a core component of responsible online behavior. This involves creating strong, unique passwords, being wary of suspicious links or attachments, and understanding the risks associated with public Wi-Fi. Protecting personal data from breaches and identity theft is increasingly important, requiring users to be proactive in safeguarding their online presence.

5.   Promoting positive online engagement is also a vital element. This encourages individuals to use digital tools for learning, collaboration, and community building. Participating in online discussions respectfully, contributing to open-source projects, and using social media for positive causes exemplify good digital citizenship, turning online spaces into constructive environments rather than merely platforms for consumption.

6.   Ultimately, fostering strong digital citizenship skills equips individuals to harness the immense potential of the internet while minimizing its inherent risks. It builds a foundation for a safer, more inclusive, and more productive online community. Educating young people and adults alike about these principles is an investment in a future where technology serves to enhance, rather than detract from, human well-being and societal harmony.

Answer the following questions, based on the passage above.

(i)   Why has the increasing focus on digital citizenship become 'essential' in paragraph 1?

(ii)   According to paragraph 1, understanding digital citizenship is crucial for all of the following EXCEPT: 1

    (A) navigating the internet positively

    (B) navigating the internet safely

    (C) limiting online interactions

    (D) responsible use of technology

(iii) Complete the following by selecting the correct option from those given in the brackets.

    Digital literacy involves discerning reliable sources from _____ (misinformation/advertisements). (Paragraph 2)

(iv) Select the option that is True from (A)-(C) given for what the phrase, 'paramount online' suggests in paragraph 3.

(A) Appropriate behavior is rarely important in online interactions.

(B) Respectful communication is of the highest importance in online settings.

(C) Online etiquette is a suggestion rather than a requirement.

(v) Complete the analogy by selecting one of the two correct options (A), (B) strong passwords: digital security ::

_____ : _____ (Paragraph 4)

(A) suspicious links: safety

(B) cyberbullying: digital etiquette

(vi) What does effective digital literacy encompass beyond just operating devices and software? (Paragraph 2)

(vii) What are the main ideas of paragraph 4 and paragraph 5? 1

(a) Protecting one's digital security is a core component of online behavior.

(b) Public Wi-Fi poses no risks to personal data.

(c) Promoting positive online engagement is a vital element.

(d) Social media should only be used for personal consumption.

(e) Creating unique passwords is not important.

Options Main idea of paragraph 4 Main idea of paragraph 5

(A) ii iv   (B) v i   (C) v iii   (D) i iii

(viii) How does fostering strong digital citizenship skills benefit individuals and the online community? (Paragraph 6)

Q.2 **R ead the following text.**

1. Air pollution is one of the leading environmental health risks, causing approximately 7 million deaths annually. Major sources of air pollution include emissions from vehicles, industrial activities, and the burning of fossil fuels. The World Health Organization (WHO) estimates that 91% of the world's population lives in areas where air quality exceeds recommended limits.

2. Fine particulate matter, also known as PM2.5, is especially harmful. These tiny particles can penetrate deep into the lungs and enter the bloodstream, leading to respiratory and cardiovascular diseases. Studies have shown that a 10 μg/m³ increase in PM2.5 levels is associated with a 6% increase in the risk of premature death.

3. In response to rising air pollution levels, many cities are adopting measures such as promoting public transportation, reducing industrial emissions, and encouraging the use of renewable energy. Countries that have implemented stricter air quality standards have seen up to a 30% decrease in PM2.5 levels over the past decade.

4. While these efforts have made progress, much more needs to be done. Experts warn that without global cooperation and stricter regulations, air pollution-related deaths could rise by 50% by 2050.

5. Addressing air pollution is critical for protecting public health, reducing healthcare costs, and combating climate change. By adopting cleaner technologies and more sustainable practices, the world can reduce the deadly impact of air pollution on both people and the planet.

Answer the following questions, based on the passage above.

(i) What does the use of the phrase "leading environmental health risks" by the writer, in paragraph 1, tell us about the severity of air pollution? 1

    (A) The writer believes air pollution has no major health impact.

    (B) The writer is highlighting air pollution as a significant global health threat.

    (C) The writer is downplaying the seriousness of air pollution.

    (D) The writer is unsure about the effects of air pollution.

(ii) Select the option that is true for the assertion and reason given below : 1

Assertion : Fine particulate matter (PM2.5) poses a major threat to public health.

Reason : PM 2.5 particles can enter the bloodstream and increase the risk of respiratory and cardiovascular diseases.

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

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

    (C) The assertion is true, but the reason is false.

    (D) The assertion is false, but the reason is true.

(iii) Identify the percentage of the world's population that lives in areas where air quality exceeds recommended limits, as mentioned in the passage.

(iv) According to the passage, what are two main sources of air pollution?

(v) Read the given prompt and select the correct option in the brackets to fill in the blank:

Efforts to reduce air pollution levels have been implemented in many countries, with positive results.

The percentage decrease in PM2.5 levels in countries with stricter air quality standards is _____ (10% / 20% / 30%).

(vi) What are some of the strategies mentioned in the passage that cities are using to combat rising air pollution levels?

(vii) Complete the sentence suitably.

Air pollution increases the risk of respiratory and cardiovascular diseases by _____.

(viii) Complete the following with a suitable reason :

Experts emphasize the importance of addressing air pollution because _____.

(ix) In the context of paragraph 5, why is addressing air pollution critical for the future of public health and the environment?

<div align="center">

SECTION B - WRITING SKILLS & GRAMMAR 20

</div>

Q.3   Complete <u>ANY TEN</u> of twelve of the following tasks, as directed.

(i) Fill in the blank by choosing the correct option to complete an online update.

The mystery of why, home _____ biggest tech cos, can't solve visa backlog.

    (a) for world's   (b) to world's   (c) of world's   (d) on world's

(ii) Read the conversation and complete the passage given below:

Gardener : Did you water the plant today?

Dev : No, but I will today.

Gardener : Then tomorrow I will get a sapling of sunflower.

The gardener asked Dev whether he had watered the plant that day. Dev replied negatively but further informed that _____.

(iii) Select the correct option to fill in the blank for the given line, from an International front.

UN World Population Prospects 2022 predict that on November 15, global population will cross 8 billion, and during 2023, India will take over China's.

(a) is predicting   (b) had predicted   (c) predicts   (d) has predicted

(iv) Select the option that identifies the error and supplies the correction for the following line, from an article:

Environment pollution has posed a serious threat not only on man but also among all living beings.

Option No. Error Correction

(a) has had   (b) threat threatened   (c) on in   (d) among amongst

(v) Complete the given narrative, by filling in the blank with the correct option:

A. J. Cronin was a Scottish novelist and physician whose _____ combining realism with social criticism won a large Anglo-American readership.

(a) was working   (b) will be working   (c) works   (d) has been working

(vi) Fill in the blank by using the correct form of the word in the bracket, for the given portion of a letter:

Subject: Bullying of a Class X student

Respected Sir/Madam,

With due respect, I bring to your notice that my brother, Ashutosh Roy, of Class X D, _____ (stay) in dormitory No. 20 for last 6 months.

(vii) Report the dialogue, by completing the sentence:

Reena : Do you know how to swim?

Surbhi : Yes, I know. I have learnt it during this summer vacation.

Reena asked Surbhi whether she knew how to swim. To this, Surbhi replied _____.

(viii) Identify the error in the given sentence, from a magazine report and supply the correction.

Of all the honours bestowed in Indian Cinema, Dada Sahib Phalke award is a jewel in the crown.

Use the given format for your response.

Error	Correction

(ix) Place the correct form of the word in the blank:

A metaphor is a figure of speech that, for _____ (rhetoric) effect, directly refers to one thing by mentioning another.

(x) Read the slogan by the Ministry of Forest. Identify the error and supply the correction.

The little effort towards saving the environment is better than no effort.

Use the given format for your response.

Error	Correction

(xi) Select the correct option to complete the narration of the dialogue between Umar and his friend, Lalit.

Umar : Where have you been all these days, Lalit?

Lalit : I was a little occupied with my board's preparation.

Umar asked Lalit where he had been all those days. In response to the question, he replied _____.

(a) he has been a little occupied with his board's preparation.

(b) that he had been a little occupied with his board's preparation.

(c) if he has been a little occupied with his board's preparation.

(d) that he has been a little occupied with his board's preparation.

(xii) Identify the error on a newspaper headline and supply the correction. In 5 years, the web of ropeways could help end Shimla city's traffic woes.

Use the given format for your response.

Error	Correction

Note: All details presented in the questions in writing section are imaginary and created for assessment purpose.

Q.4 A Your school had organised an educational trip to Fatehpur Sikri and Agra. You notice the dilapidated condition of some of the monuments. Write a letter to the Municipal Chairman of Agra mentioning the condition and requesting him to take urgent steps for the prevention of this valuable heritage. You are Anuj/Anju, 40 Civil Lines, New Town. (100-120 words)

Q.4 B You are Anshul/ Anshika, a student of Grade X and a resident of 36 D Ring Road, ITO, New Delhi, wants to be a choreographer. Recently you came across an advertisement by Set Fire Dance Academy, MG Road, New Delhi, which offers various forms of dancing.

Write an enquiry letter seeking information about the course and its package. (100-120 words)

Q.5 A. The given chart shows the division of household tasks by gender in Great Britain. Write an analytical paragraph describing the chart, in not more than 100-120 words.

Q.5 B. Given below is a tabular statistic showing the quality of life in five countries, assessed under specific parameters.

Write an analytical paragraph on the given information by selecting and reporting the main features, and make comparisons where relevant. Write in 100-120 words.

Country GNP per head

(1982 : US dollars)

Daily calorie supply per head

Life expectancy at birth (years)

Infant mortality

(per 1000 live births)

Bangladesh 140 1877 40 132

Bolivia 570 2086 50 124

Egypt 690 2950 56 97

Indonesia 580 2296 49 87

SECTION-C
LITERATURE TEXTBOOK

Q.6   **Read the given extracts and answer ANY ONE of the two questions given below**

A.   The moon was coming up in the east, behind me, and stars were shining in the clear sky above me. There wasn't a cloud in the sky. I was happy to be alone high up above the sleeping countryside.

(Two Stories about Flying)

(i)   What feeling does the pilot experience, as described in the lines below?

"The moon was coming up in the east, behind me, and stars were shining in the clear sky above me. There wasn't a cloud in the sky. I was happy to be alone high up above the sleeping countryside."

Choose the most suitable option:

(a)   loneliness   (b) contentment   (c) anxiety   (d) confusion

(ii)   What is the significance of not a single cloud in the sky?

(iii)   What was the pilot flying?

(iv)   How did the pilot feel after calling the Paris Control the first time? Answer in about 40 words.

B.   "It was only when I began to learn that my boyhood freedom was an illusion, when

I discovered as a young man that my freedom had already been taken from me, that I began to hunger for it. At first as a student I wanted freedom only for myself the transitory freedoms of being able to stay out at night, read what I pleased and go where I chose. Later; as a young man in Johannesburg, I yearned for the basic and honourable freedoms of achieving my potential, of earning my keep, of marrying and having a family-the freedom not to be obstructed in a lawful life."

(Nelson Mandela: Long Walk to Freedom)

(i)   The speaker's attitude towards his freedom when he was in his boyhood can be summed up as _____.

(a) being self- centered   (b) being naive

(c) being foolish   (d) being indifferent to others

(ii)   How does Nelson Mandela understand the concept of "transitory freedoms"? Answer in about 40 words.

(iii)   In the statement, 'I discovered as a young man that my freedom had already been taken from me, that I began to hunger for it,' what was Mandela hungering after?

(iv)   If 'Point of View' is the narration of a story that can be told from a first, second, or third person's point of view, the given extract is told _____.

Q.7   Read the given extracts and answer the questions for ANY ONE of the two, given.

A.   "Ink trickled down to the bottom of the household and little mouse Blink strategically mouseholed. But up jumped Custard, snorting like an engine, Clashed his tail like irons in a dungeon, With a clatter and a clank and a jangling squirm, He went at the pirate like a robin at a worm."

(The Tale of Custard the Dragon)

(i)   Complete the sentence appropriately.

It is clear that the figure of speech used in 'With a latter and a clank and a jangling

Squirm' is Onomatopoeia because _____.

(ii) What is the poet's purpose in using the onomatopoeic words given in the extract?

(a) To emphasise the boldness of Custard

(b) To introduce the character

(c) To impress upon the readers

(d) To make Custard bold enough

(iii) The extract mentions 'irons' in dungeons.

According to this extract, what does 'irons' refer to?

(iv) 'He went at the pirate like a robin at a worm. Why has this comparison been used here?

Answer in about 40 words.

B.   If strolling forth, a beast you view,

Whose hide with spots is peppered,

As soon as he has lept on you,

You'll know it is the Leopard.

'Twill do no good to roar with pain,

He'll only lep and lep again.

(How to Tell Wild Animals)

(i) In what way does the language used in this line challenges the traditional ideas of how poetry should be written?

"I will do no good to roar with pain, He'll only lep and lep again."

(ii) What is the significance of humour while describing the wild beasts in the poem and how does this contribute to the overall mood and tone of the poem? Answer in about 40 words.

(iii) Complete the sentence with the appropriate option.

The contextual meaning of the word 'peppered' in the stanza _____.

(a) refers to the spots of the leopard

(b) refers to the camouflage of the leopard

(c) means that the leopard has spotted you

(d) means that you have spotted the leopard

(iv) Why does roaring with pain will not do any good?

Q.8   Answer <u>ANY FOUR</u> of the following five questions, in about 40-50 words.

(i) Chubukov says of Natalya: "... as if she won't consent! She's in love; egad, she's like a lovesick cat..." Would you agree? Find reasons for your answer.

(The Proposal)

(ii) Why does the poet say that 'Money is external'?

(The Ball Poem)

(iii) How is the fog like a cat? What three things does the poem suggest?

(Fog)

(iv) Why did Maxwell call the airhostess "the very queen of her kind"?

(Mijbil the Otter)

(v) 'Paper has more patience than people.' Do you agree/disagree? Give reason.

(From the Diary of Anne Frank)

Q.9   Answer <u>ANY TWO</u> of the following three questions, in about 40-50 words.

(i) "But there was one thing I could do-collect things". What collection did Ebright make?

When did he start making collection?

(The Making of a Scientist)

(ii) The best way to defend is to offend, but the same thing is not seen by Noodle. How does he manage to do that?

(The Book That Saved the Earth)

(iii) "Guilty mind is always conscious". Do you think the thief was on the contrary obliged to Anil? Substantiate your

answer.

(The Thief's Story)

Q.10   Answer <u>ANY ONE</u> of the following two questions, in about 100-120 words.

(i) Imagine a software engineer meets Buddha and communicates the modern age anxiety and the threat of livelihood.

Suggest some philosophical tools which Buddha must have preached him to handle the same.

(The Sermon at Benares)

(ii) "Not enough can be said to show how important a baker can be for a village". How were the services of the baker

required on various occasions?

(Glimpses of India)

Q.11   Answer <u>ANY ONE</u> of the following two questions, in about 100-120 words.

(i) Our sins never go unpunished. Horace Danby ultimately had to go to prison. This shows that in spite of planning

a crime intelligently and carefully, a criminal can't escape the law. Explain.

(A Question of Trust)

(ii) Bholi and Matilda, both are distinct characters, wherein one gave importance to selfinstinct and the other gave

importance to her beauty. Assume they both meet each other at Bholi's wedding and had a conversation over the

greed of Bishamber.

Write this conversation as per your understanding of 'Bholi' and The Necklace'.

You may begin like this:

Matilda : Are you fine now?

Bholi : Ya! much relieved.

(Bholi)

हिंदी (ब)

खंड–अ (बहुविकल्पीय प्रश्न / वस्तुपरक प्रश्न)

प्र०1 निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर लिखिएः–

ग्रीष्म अवकाश के समय को पढ़ाई के दबाव से परे रचनात्मक सोच, सामुदायिक समझ और रिश्तों से जुड़ाव को पोषित करने में लगाना जरूरी है। सामुदायिक केन्द्रों से जुड़े और सेवा देने वाले बच्चों का स्वास्थ्य बेहतर होता है। ऐसे बच्चे न केवल समाज से जुड़ते हैं, बल्कि खुश भी रहते हैं।

यह जुड़ाव बच्चों की मानसिक और शारीरिक सेहत सँवारने के साथ ही मानवीय प्रवृत्तियों को भी सार्थक दिशा देता है।

छुट्टियों का समय रिश्तों दृ नातों को जानने और जीने का भी मौका होता है। पहले संयुक्त परिवार में बच्चे दादा–दादी, चाचा–चाची, ताऊ ताई, बुआ के साथ रह कर बड़े होते थे । रिश्तेदारों का आना–जाना भी खूब होता था। मगर अब ऐसी व्यस्त जिंदगी है कि बच्चे सिर्फ अपने माता–पिता को ही जानते हैं। छुट्टियों का यह समय ऐसे सम्बन्धों को जीने और जानने में लगाया जाए, यह खुद बच्चों के लिए ही नहीं, हमारे पारिवारिक और सामाजिक ताने–बाने को सहेजने के लिए भी जरूरी है। कुछ साल पहले एक ऑनलाइन पर्यटन कंपनी द्वारा किए गए परिवार सर्वेक्षण के अनुसार सत्तानवे प्रतिशत भारतीय किशोरों ने महसूस किया कि परिवार की छुट्टियाँ उन्हें अपने भाई–बहनों के करीब लाती हैं। उनहत्तर प्रतिशत ने माना कि उनकी पसंदीदा यादें परिवार के साथ बिताई छुट्टियों से जुड़ी हैं। बहुत–से सामाजिक मनोवैज्ञानिक अध्ययन भी बताते हैं कि अवकाश का समय बच्चों को नई ऊर्जा और उत्साह से भर देता है। छुट्टियाँ बच्चों को खुश और होशियार बनाती हैं। सामाजिक कौशल सिखाती हैं। यह अभिभावकों के साथ अनौपचारिक रूप से संवाद करने का समय होता है। भटकाव के मौजूदा परिवेश में ऐसा खुला संवाद किशोरों की मानसिकता समझने में सहायक होता है। नई पीढ़ी को दिशाहीन होने से बचा सकता है। समय रहते अभिभावकों को सचेत कर सकता है।

प्रश्न–उत्तरः–

(क) सामुदायिक केन्द्रों में सेवा देने वाले बच्चे किस प्रकार लाभान्वित होते हैं?

   (I) बेहतर स्वास्थ्य पाकर   (II) प्रसन्नचित्त होकर   (III) व्यस्त होकर   (IV) वेतन पाकर

विकल्प

   (अ) I और II   (ब) III और IV   (स) I और III   (द) II और IV

(ख) निम्नलिखित कथन तथा कारण को पढ़िए। उसके बाद दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए–

   कथन (A): पारिवारिक ताने–बाने को सहेजने की आवश्यकता है।

   कारण (R): परिवारों और समाज के संकुचित होने से स्वस्थ सामाजिक विकास अवरुद्ध हो रहा है।

विकल्प

(i) कथन (A) और कारण (R) दोनों गलत हैं।

(ii) कथन (A) और कारण (R) दोनों सही हैं तथा कारण (R), कथन (A) की सही व्याख्या करता है।

(iii) कथन (A) सही है, लेकिन कारण (R) उसकी गलत व्याख्या करता है।

(iv) कथन (A) गलत है, लेकिन कारण (R) सही है।

(ग) निम्नलिखित में से कौन–सा/से वाक्य गद्यांश से मेल खाता है/खाते हैं?

(I) अवकाश बच्चों में नई ऊर्जा और उत्साह भरता है।

(II) छुट्टियों में भाई–बहनों के समीप आने की संभावना बढ़ती है।

(III) माता–पिता से बहुत कुछ जानने–सीखने का अवसर मिलता है।

(IV) नई पीढ़ी के दिशाहीन होने की संभावनाएँ बढ़ती हैं।

विकल्प

(a) केवल I   (b) केवल IV   (c) II और III   (d) I, II और III

(घ) अब पारिवारिक संबन्धों में क्या बड़ा परिवर्तन हुआ है?

(ङ) बच्चों के बीच रचनात्मक सोच, सामुदायिक समझ और रिश्तों से जुड़ाव को पोषित करने के लिए क्या अपेक्षित है?

प्र०2   निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़ कर पूछे गए प्रश्नों के उत्तर लिखिएः–

नदियों को धरती का प्राण माना जाता है। ये हमारी पृथ्वी व समस्त जीव–जगत को जीवन देती हैं। जब नदियों के जीवन पर ही संकट मंडरा रहा हो तो अन्य जीव जगत पर क्या असर होगा ?

यह स्थिति डराती है। खासकर तब, जब विशेषज्ञों का मानना है कि 2030 तक दुनिया में पानी की माँग कुल आपूर्ति से ज्यादा हो जाएगी। इसका एक बड़ा कारण यह भी है कि हमने नदियों के प्रवाह को बाधित किया है, उनके प्रवाह मार्ग में अवरोध पैदा किए हैं और उनमें अपनी आत्मा का सर्वस्व उड़ेलने वाली छोटी नदियों की परवाह ही नहीं की। नदियों के तटों पर अतिक्रमण कर हम विकास का नारा बुलंद कर रहे हैं। नदियाँ दुःखी न हों तो क्या करें ? ब्रिटेन, फ्रांस, जर्मनी, नीदरलैण्ड सहित यूरोप के विविध देशों में शायद इसीलिए नदियों के तटबंध तोड़े जा रहे हैं ताकि नदियों को उद्दाम प्रवाह की आजादी मिल सके। इस प्रसंग में छोटी नदियों को पुनर्जीवित करना बहुत जरूरी है, क्योंकि छोटी नदियाँ न केवल किसी क्षेत्र विशेष की जल सम्बन्धी जरूरतों को पूरी करती हैं, बल्कि अनेक छोटी नदियाँ मिलकर किसी बड़ी नदी को अपने समर्पण से समृद्ध भी करती हैं।

छोटी नदियों को बचाने के लिए संसाधनों से अधिक संकल्प की आवश्यकता है। भू–जल स्तर, पारिस्थितिकी तंत्र एवं जैव विविधता को स्थिर रखने के लिए नदियों के प्रवाह क्षेत्र को अतिक्रमण से बचाना व प्रदूषण मुक्त रखना बेहद जरूरी है। शासन–प्रशासन व आमजन की दृढ़ इच्छाशक्ति, निगरानी और नियंत्रण द्वारा ही नदियों को बचाया जा सकता है।

प्रश्न–उत्तरः–

(क) गद्यांश के अनुसार कौन–सी स्थिति डराती है।

(ख) विशेषज्ञ 2030 तक, किस बात के लिए सचेत कर रहे हैं?

(i) लगभग सभी नदियाँ प्रदूषित हो जाएँगी।

(ii) हमें नदियों का प्रवाह बाधित करना पड़ेगा।

(iii) हमें छोटी नदियों की परवाह करनी होगी।

(iv) जल की आपूर्ति जल की माँग से बहुत कम हो जाएगी।

(ग) नदियों को जीवित रखने के लिए क्या–क्या करना होगा ?

(i) तट अतिक्रमण पर रोक

(ii) पुनर्जीवित करने की कोशिश

(iii) आत्मा का सर्वस्व उड़ेलना

(iv) विकास का नारा बुलंद करना

विकल्प

(अ) i और ii   (ब) iii और iv   (स) ii और iii   (द) i और iv

(घ) निम्नलिखित कथन (A) और कारण (R) को पढ़िए। उसके बाद दिए गए विकल्पों में से कोई एक सही विकल्प चुनिए–

कथन (A): यूरोप के देशों में नदियों के तटबंध तोड़े जा रहे हैं।

कारण (R): नदियों को उद्दाम प्रवाह की आजादी मिले और वे पुनर्जीवित हो जाएँ ।

विकल्प

(अ) कथन (A) और कारण (R) दोनों गलत हैं।

(ब) कथन (A) सही है, लेकिन कारण (R) उसकी गलत व्याख्या करता है।

(स) कथन (A) व कारण (R) दोनों सही हैं तथा कारण (R), कथन(A) की सही व्याख्या करता है।

(द) कथन (A) गलत है, लेकिन कारण (R) सही है।

(ङ) 'जैव विविधता' से अभिप्राय है?

प्र०3   निर्देशानुसार 'पदबंध' पर आधारित निम्नलिखित पाँच बहुविकल्पी प्रश्नों में से <u>किन्हीं चार</u> प्रश्नों के उत्तर दीजिएः–

(क) लगा कि पूरा एक काफ़िला चला आ रहा हो।– वाक्य में से क्रियापदबंध चुनकर लिखिए।

(ख) "<u>कोई पाँच महीने</u> हुकूमत की होगी।" में रेखांकित पदबंध का भेद कारण सहित लिखिए।

(ग) "बाहर बेढब–सा एक मिट्टी का बरतन था।" रेखांकित पदबंध का भेद हुए कारण भी स्पष्ट कीजिए।

(घ) क्रिया पदबंध और क्रिया–विशेषण पदबंध में उदाहरण देकर अंतर स्पष्ट कीजिए ।

(ङ) पद और पदबंध में क्या अंतर है? उदाहरण देकर स्पष्ट करें।

प्र०4   निर्देशानुसार 'रचना के आधार पर वाक्य–भेद' पर आधारित निम्नलिखित पाँच बहुविकल्पी प्रश्नों में से <u>किन्हीं चार</u> प्रश्नों के उत्तर दीजिए।

(क) 'एक लोककथा है जो आज भी दोहराई जाती है।' वाक्य का भेद बताते हुए कारण स्पष्ट कीजिए।

(ख) निकोबारी उसे बहुत प्रेम करते थे क्योंकि वह समझदार था। सरल वाक्य में रूपांतरित कीजिए।

(ग) "उसे ज्ञात ही न हो सका कि अजनबी युवक उसे ताके जा रहा था।" रचना के आधार पर वाक्य–भेद कारण सहित लिखिए।

(घ) संयुक्त वाक्य और मिश्र वाक्य में उदाहरण द्वारा अंतर स्पष्ट कीजिए।

(ड) निम्नलिखित में मिश्र वाक्य छाँटकर लिखिए–

    (a) कुछ था जो दोनों के भीतर बह रहा था।

    (b) कुछ युवकों ने इस प्रेम को भाँप लिया।

    (c) वामीरो कुछ सचेत हुई और घर की तरफ दौड़ पड़ी।

    (d) दोनों के हृदय व्यथित थे।

प्र05 निर्देशानुसार 'समास' पर आधारित निम्नलिखित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिएः–

(क) 'सप्ताह' समस्तपद का विग्रह कर समास का नाम लिखिए।

(ख) 'कनक के समान लता' किस समास का भेद है और क्यों?

(ग) उत्तर पद किस समास में प्रधान होता है?

(घ) महाजन समस्तपद में .... विशेषण और .... विशेष्य है तो समास होगा .... ।

(ड) 'बेवक्त' समस्तपद का विग्रह कर समास का नाम लिखिए।

प्र06 निर्देशानुसार 'मुहावरे' पर आधारित निम्नलिखित छह बहुविकल्पी प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिएः–

(क) 'रहस्य प्रकट होना' अर्थ के लिए उपयुक्त मुहावरा लिखिए।

(ख) "माता–पिता और बड़ों के उपदेश बुरे लगते हैं लेकिन बाद में वही बातें प्रेरित करती हैं।"– रेखांकित अंश के लिए उपयुक्त मुहावरा लिखिए ।

(ग) 'अंधे के हाथ बटेर लगना 'मुहावरे का अर्थ लिखिए।

(घ) 'दिन गिनना' मुहावरे का वाक्य बनाइए।

(ड) कठिन परिश्रम करना / कठिनाई का अनुभव होना' अर्थ के लिए उचित मुहावरा लिखिए।

खंड–ग (पाठ्यपुस्तक)

प्र07 निम्नलिखित गद्यांश को पढ़ कर पूछे गए प्रश्नों के उत्तर सर्वाधिक उचित विकल्प से चुनकर लिखिएः–

दुनिया कैसे वजूद में आई? पहले क्या थी? किस बिंदु से इसकी यात्रा शुरू हुई ? इन प्रश्नों के उत्तर विज्ञान अपनी तरह से देता है, धार्मिक ग्रंथ अपनी–अपनी तरह से। संसार की रचना भले ही कैसे हुई हो लेकिन धरती किसी एक की नहीं है। पंछी, मानव, पशु, नदी, पर्वत, समंदर आदि की इसमें बराबर की हिस्सेदारी है। यह और बात है कि इस हिस्सेदारी में मानव जाति ने अपनी बुद्धि से बड़ी–बड़ी दीवारें खड़ी कर दी हैं। पहले पूरा संसार एक परिवार के समान था अब टुकड़ों में बँटकर एक–दूसरे से दूर हो चुका है।

पहले बड़े–बड़े दालानों–आँगनों में सब मिल–जुलकर रहते थे, अब छोटे–छोटे डिब्बे जैसे घरों में जीवन सिमटने लगा है। बढ़ती हुई आबादियों ने समंदर को पीछे सरकाना शुरू कर दिया है, पेड़ों को रास्तों से हटाना शुरू कर दिया है, फैलते हुए प्रदूषण ने पंछियों को बस्तियों से भगाना शुरू कर दिया है। बारूदों की

विनाशलीलाओं ने वातावरण को सताना शुरू कर दिया। अब गरमी में ज्यादा गरमी, बेवक्त की बरसातें, जलजले, सैलाब, तूफान और नित नए रोग, मानव और प्रकृति के इसी असंतुलन के परिणाम हैं।

प्रश्न–उत्तरः–

(क) गद्यांश में आई पंक्ति 'पहले पूरा संसार एक परिवार के समान था अब टुकड़ों में बँटकर एक–दूसरे से दूर हो चुका है।' का भाव है–

    (i) संसार देश और प्रांत में बँट चुका है।

    (ii) संयुक्त परिवार एकल परिवारों में बँट गए हैं।

    (iii) वसुधैव कुटुम्बकम् की भावना समाप्त हो गई है।

    (iv) एक देश से दूसरे देश को जाना कठिन हो गया है।

(ख) गद्यांश में प्रयुक्त 'छोटे–छोटे डिब्बे जैसे घर'–संकेत करते हैं–

    (i) फ्लैट संस्कृति की ओर

    (ii) छोटे–छोटे घरों की ओर

    (iii) एक कमरे के घरों की ओर

    (iv) बहुमंजिला इमारतों की ओर

(ग) बढ़ती हुई आबादी को बसाने के लिए क्या नहीं किया गया ?

    (i) समंदर की जमीन को हथियाना शुरू कर दिया गया।

    (ii) वन प्रदेश का सफाया करना शुरू कर दिया गया।

    (iii) पशु–पक्षियों को घर से बेघर कर दिया गया।

    (iv) खनिज पदार्थों का मनमाना दोहन किया गया।

(घ) गद्यांश के अनुसार बढ़ती प्राकृतिक आपदाएँ परिणाम हैं–

    (i) दिनोंदिन बढ़ने वाले प्रदूषण का

    (ii) मनुष्य के बढ़ते लालच का

    (iii) मानव और प्रकृति के बीच असंतुलन का

    (iv) पर्वतीय प्रदेशों में होने वाले कटाव का

(ङ) निम्नलिखित कथन(A) तथा कारण (R) को ध्यानपूर्वक पढ़िए और दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिएः–

    कथन (A): फैलते हुए प्रदूषण ने पंछियों को बस्तियों से भगाना शुरू कर दिया है।

    कारण (R): मानव ने अपनी बुद्धि से बड़ी–बड़ी दीवारें खड़ी कर दी हैं।

    (i) कथन (A) तथा कारण (R) दोनों गलत हैं।

    (ii) कथन (A) गलत है, लेकिन कारण (R) सही है।

    (iii) कथन (A) सही है, लेकिन कारण (R) उसकी गलत व्याख्या करता है।

    (iv) कथन (A) तथा कारण (R) दोनों सही हैं तथा कारण (R) कथन (A) की सही व्याख्या करता ळें

प्र08 गद्य–खण्ड पर आधारित निम्नलिखित प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25–30 शब्दों में लिखिएः–

(क) 'बड़े भाई साहब' कहानी से उद्धरित इस पंक्ति–'सफल खिलाड़ी वह है जिसका कोई निशाना खाली न जाए।' का आशय स्पष्ट कीजिए।

(ख) 'तीसरी कसम के शिल्पकार शैलेंद्र' पाठ के आधार पर सिद्ध कीजिए कि मूल कहानी का रेशा–रेशा, छोटी–छोटी बारीकियाँ तीसरी कसम फिल्म में उतर आई हैं।

(ग) 'कारतूस' एकांकी के किस पात्र ने आपको सर्वाधिक प्रभावित किया है? उसके चरित्र की किस विशेषता को आप अपनाना चाहेंगे और क्यों ?

(घ) 'अब कहाँ दूसरे के दुःख में दुःखी होने वाले' पाठ के माध्यम से लेखक ने क्या प्रतिपादित किया है?

प्र09 निम्नलिखित पठित पद्यांश को ध्यानपूर्वक पढ़कर, उस पर आधारित दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए –

कस्तूरी कुंडलि बसै, मृग ढूँढ़ बन माँहि।
ऐसैं घटि घटि राँम है, दुनियाँ देखे नाँहिं।।
जब मैं था तब हरि नहीं, अब हरि हैं मैं नाँहि।
सब अँधियारा मिटि गया, जब दीपक देख्या माँहि।।

(क) 'कस्तूरी कुंडलि बसै.......' दोहे में किसका वर्णन किया गया है?
    (i) कस्तूरी ढूँढ़ने वाले मृग का   (iii) अपनी ही विशेषता से अनजान मनुष्य का
    (ii) सांसारिकता में लीन मानव का   (iv) ईश्वर की सर्वव्यापकता का

(ख) 'जब मैं था तब हरि नहीं' पंक्ति में 'मैं' से अभिप्राय है–
    (i) अहंकार की भावना   (iii) सांसारिक माया–मोह
    (ii) स्वार्थ की भावना   (iv) स्वयं कवि

(ग) 'जब मैं था तब हरि नहीं' दोहे के अनुसार हृदय में ईश्वर का निवास कब तक असंभव है?
    (i) जब तक सच्चे हृदय से उसे याद न किया जाए।
    (ii) जब तक सांसारिक विषय–वासनाओं को न छोड़ा जाए।
    (iii) जब तक अहंकारपूर्ण व्यवहार का नाश न किया जाए।
    (iv) जब तक सच्चे हृदय से उसकी सेवा न की जाए।

(घ) 'जब दीपक देख्या माँहि' पंक्ति में 'दीपक' प्रतीकार्थ है–
    (i) प्रभु प्रेम के प्रकाश का   (iii) प्रकाश का
    (ii) रोशनी के साधन का   (iv) संपन्नता क

(ङ) निम्नलिखित कथन तथा कारण को ध्यानपूर्वक पढ़िए और दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए–
    कथन (A): ईश्वर सृष्टि के कण–कण में निवास करते हैं पर हम उन्हें देख नहीं पाते।
    कारण (R): मनुष्य के पास दिव्य–दृष्टि नहीं है।
    (i) कथन (A) तथा कारण (R) दोनों गलत हैं
    (ii) कथन (A) गलत है, लेकिन कारण (R) सही है।

(iii) कथन (A) सही है, लेकिन कारण (R) उसकी गलत व्याख्या करता है।

(iv) कथन (A) तथा कारण (R) दोनों सही हैं तथा कारण (R) कथन (A) की सही व्याख्या करता है।

प्र॰10 काव्य खंड पर आधारित निम्नलिखित प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25–30 शब्दों में लिखिए:–

(क) 'कर चले हम फिदा' कविता से उधृत–'साँस थमती गई, नब्ज जमती गई' पंक्ति के संदर्भ में सैनिक जीवन की कठिनाइयों का उल्लेख कीजिए।

(ख) 'तोप' कविता के आधार पर लिखिए कि पूर्वजों से मिली धरोहर का क्या महत्त्व है? इन्हें सँभालकर क्यों रखा जाता है?

(ग) मीरा के 'पद' के आधार पर लिखिए कि द्रौपदी, प्रहलाद आदि का उल्लेख कर मीरा भगवान को उनका कौन–सा रूप स्मरण करवा रही है और क्यों ?

(घ) 'मनुष्यता' कविता के माध्यम से कवि ने किन गुणों को अपनाने का संकेत दिया है? तर्क सहित उत्तर दीजिए।

(ड.) क्या कवि रवींद्रनाथ ठाकुर की यह प्रार्थना (आत्मत्राण)आपको अन्य प्रार्थना गीतों से अलग लगती है? यदि हाँ, तो कैसे?

खंड घ (रचनात्मक लेखन)

प्र॰11 निम्नलिखित में से किसी एक विषय पर दिए गए संकेत–बिन्दुओं के आधार पर लगभग 120 शब्दों में एक अनुच्छेद लिखिए:–

(i) ध्वनि प्रदूषण

संकेत बिंदु– • अर्थ • इसके कारण • हानि • समाधान।

(ii) विश्वशांति

संकेत बिंदु– • शब्द का अर्थ • आवश्यकता • संभावित उपाय • लाभ

(iii) दौड़ती हुई जिंदगी

संकेत–बिन्दु– •कैसे? •कारण •आवश्यकताओं में वृद्धि • क्या करें ?

प्र॰12 निम्नलिखित में से किसी एक विषय पर लगभग 100 शब्दों में पत्र लिखिए:–

आप भुवन गुलेरिया / भावना गुलेरिया हैं और अ.ब.स. नगर में रहते / रहती हैं। आपके क्षेत्र के पार्क को लोगों ने सार्वजनिक धरना–प्रदर्शन का केन्द्र बना दिया है जिससे वहाँ के निवासियों को अनेक समस्याओं का सामना करना पड़ रहा है। इस समस्या की ओर सम्बन्धित अधिकारियों का ध्यान आकर्षित करने के लिए 'जागरूक' समाचार–पत्र, मुंबई के संपादक को लगभग 100 शब्दों में एक पत्र लिखिए।

अथवा

आप ए–64, कृष्णा नगर, दिल्ली निवासी अजया/अजया हैं। सरकार की 'जन धन योजना' पर अपने विचार व्यक्त करते हुए किसी प्रतिष्ठित समाचार–पत्र के सम्पादक को पत्र लिखिए।

प्र०13 निम्नलिखित में से किसी <u>एक</u> विषय पर लगभग 60 शब्दों में सूचना लिखिए–

विद्यालय की सांस्कृतिक सभा के सचिव होने के नाते 'गणतंत्र दिवस' के अवसर पर आयोजित कार्यक्रम के विषय में विद्यार्थियों को सूचित करने के लिए लगभग 80 शब्दों में सूचना तैयार कीजिए।

अथवा

आप अपने विद्यालय में 'सृजन इप्सा कल्ब ' के सचिव हैं। शनिवार को आगामी साहित्यिक गतिविधियों पर चर्चा हेतु बैठक बुलाई गई है, जिसकी सूचना 80 शब्दों में तैयार कीजिए।

प्र०14 निम्नलिखित में से किसी <u>एक</u> विषय पर लगभग 40 शब्दों में विज्ञापन लिखिएः–

लोकल फॉर वोकल (स्थानीय उत्पादों का प्रयोग) के प्रचार–प्रसार के लिए एक आकर्षक विज्ञापन लगभग 60 शब्दों में तैयार कीजिए।

अथवा

आपके बड़े भाई ने कक्षा 10–12 तक के छात्रों को गणित निःशुल्क पढ़ाने का निर्णय लिया है। इस विषय में, आवश्यक जानकारी देते हुए एक आकर्षक विज्ञापन 60 शब्दों में तैयार कीजिए।

प्र०15 दिए गए संकेत–बिन्दुओं के आधार पर (100 शब्दों में) लघु कथा लिखिएः–

संकेत बिन्दु– नदी में अपने शिष्यों के साथ स्नान करता एक साधु ....बहते बिच्छू को दया करके उठाना........ बिच्छू का साधु को काटना....... साधु का पुनः उठाना......... शिष्य का घटना को देखना....... साधु से बिच्छू को न निकालने को कहना...... साधु का उत्तर–जब बिच्छू अपना स्वभाव नहीं छोड़ता तो मैं क्यों छोडूं ?

अथवा

किसी पाठ्यक्रम विवरण के सम्बन्ध में जानकारी प्राप्त करने के लिए ई–मेल करें।

MATHEMATICS

(Section A consists of 20 questions of 1 mark each.)

Q.1 If LCM (x, 18) = 36 and HCF (x, 18) = 2, then x is:

    (a) 2   (b) 3   (c) 4   (d) 5

Q.2 In $\triangle ABC$ right angled at B, if $\tan A = \sqrt{3}$, then then $\cos A \cos C - \sin A \sin C =$

    (a) −1   (b) 0   (c) 1   (d) $\frac{\sqrt{3}}{2}$

Q.3 If $2\sin^2 \beta - \cos^2 \beta = 2$, then β is:

    (a) 0°   (b) 90°   (c) 45°   (d) 30°

Q.4 The ratio of LCM and HCF of the least composite and the least prime numbers is:

    (a) 1: 2   (b) 2: 1   (c) 1: 1   (d) 1: 3

Q.5 The value of k for which the lines $5x + 7y = 3$ and $15x + 21y = k$ coincide is:

    (a) 9   (b) 5   (c) 7   (d) 18

Q.6 Write a quadratic polynomial whose sum of zeroes is $-\frac{1}{4}$ and product of zeroes is $\frac{1}{4}$

    (a) $4x^2 + x + 1$ (b) $x^2 + 4x - 1$ (c) $2x^2 + 3x - 1$ (d) $x^2 - 2x + 1$

Q.7 A horse is tied to a pole with 28 m long rope. The perimeter of the field where the horse can graze is (Take $\pi = \frac{22}{7}$)

    (a) 60 cm   (b) 85 cm   (c) 124 cm   (d) 176 cm

Q.8 Two dice are thrown at the same time. The probability of getting not doublet is

    (a) $\frac{1}{3}$ (b) $\frac{1}{6}$ (c) $\frac{1}{5}$ (d) $\frac{5}{6}$

Q.9 $\triangle ABC \sim \triangle PQR$. If AM and PN are altitudes of $\triangle ABC$ and $\triangle PQR$ respectively and $AB^2: PQ^2 = 4: 9$, then AM: PN =

    (a) 16: 81   (b) 4: 9   (c) 3: 2   (d) 2: 3

Q.10 In the given figure, PA and PB are tangents to the circle with centre O. If $\angle APB = 60°$, then $\angle OAB$ is
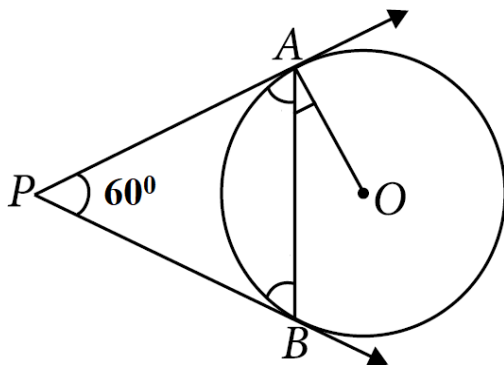
    (a) 30°   (b) 60°   (c) 90°   (d) 15°

Q.11 If the difference of Mode and Median of a data is 24, then the difference of median and mean is

    (a) 8   (b) 12   (c) 24   (d) 36

Q.12 For the following distribution:

Class	0-5	5-10	10-15	15-20	20-25
Frequency	10	15	12	20	9

the sum of lower limits of the median class and modal class is

(a) 15   (b) 25   (c) 30   (d) 35

Q.13 If $5 \tan \theta = 4$, then the value of $5\sin\theta - 3\cos\theta$ is $5\sin\theta + 2\cos\theta$

(a) $\frac{1}{6}$ (b) $\frac{1}{7}$ (c) $\frac{1}{4}$ (d) $\frac{1}{5}$

Q.14 The ratio of the volumes of two spheres is 8 : 27. The ratio between their surface areas is

(a) 2 : 3   (b) 4 : 27   (c) 8 : 9   (d) 4 : 9

Q.15 The area of the circle that can be inscribed in a square of 6cm is

(a) $36\pi \text{ cm}^2$ (b) $18\pi \text{ cm}^2$ (c) $12\pi \text{ cm}^2$ (d) $9\pi \text{ cm}^2$

Q.16 In the figure, if DE ∥ BC, AD = 3 cm, BD = 4 cm and BC = 14 cm, then DE equals:
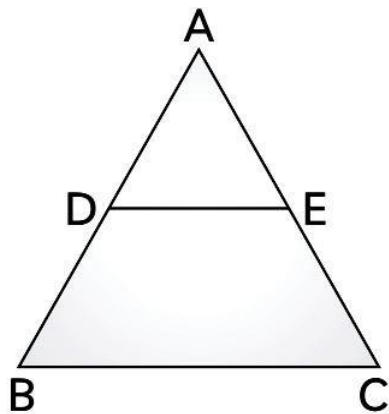
(a) 7 cm   (b) 6 cm   (c) 4 cm   (d) 3 cm

Q.17 The vertices of a parallelogram in order are A(1, 2), B(4, y), C(x, 6) and D(3, 5). Then (x, y) is:

(a) (6, 3)   (b) (3, 6)   (c) (5, 6)   (d) (1, 4)

Q.18 ABCD is a trapezium with AD ∥ BC and AD = 4cm. If the diagonals AC and BD intersect each other at O such that $AO/OC = DO/OB = \frac{1}{2}$, then BC =

(a) 6cm   (b) 7cm   (c) 8cm   (d) 9cm

DIRECTION: In the question number 19 and 20, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option

Q.19 **Assertion (A):** The number 6n, n being a natural number, ends with the digit 5.

Reason (R): The number 9n cannot end with digit 0 for any natural number n.

(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 and 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.

Q.20 **Assertion (A):** The point (–1, 6) divides the line segment joining the points (–3, 10) and (6, –8) in the ratio 2 : 7 internally.

Reason (R): Given three points, i.e. A, B, C form an equilateral triangle, then AB = BC = AC.

(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 and 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.

SECTION – B
Questions 21 to 25 carry 2 marks each.

Q.21 If sin (A + B) = 1 and cos (A – B) = $\frac{\sqrt{3}}{2}$, 0°< A + B ≤ 90° and A > B, then find the measures of angles A and B.

OR

Find an acute angle θ when $\frac{\cos\theta - \sin\theta}{\cos\theta + \sin\theta} = \frac{1-\sqrt{3}}{1+\sqrt{3}}$

Q.22 In the given figure below, if $\frac{AD}{AE} = \frac{AC}{BD}$ and ∠1=∠2. Show that Δ BAE~ ΔCAD.
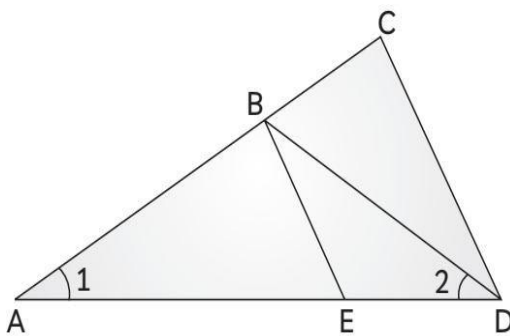
Q.23 Find the value of α such that the quadratic equation (α– 12)x² + 2(α – 12)x + 2 = 0, has equal roots.

Q.24 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
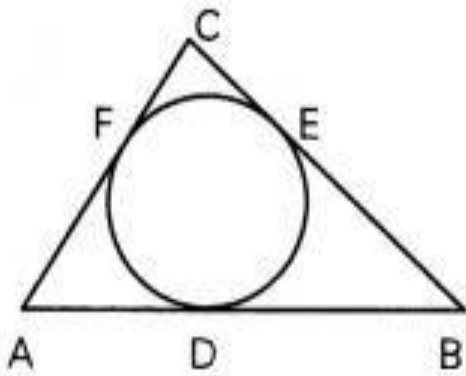
Q.25 The length of the minute hand of a clock is 6cm. Find the area swept by it when it moves from 5:25 pm to 6:00 pm.

OR

In the given figure, the shape of the top of a table is that of a sector of a circle with centre O and ∠AOB = 90°. If AO = OB = 42 cm, then find the perimeter of the top of the table is [Take π =22/7]
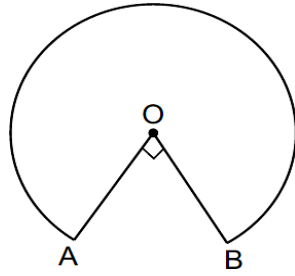
SECTION – C
Questions 26 to 31 carry 3 marks each.

Q.26 A man wished to give Rs. 12 to each person and found that he fell short of Rs. 6 when he wanted to give to all the persons present. He, therefore, distributed Rs. 9 to each person and found that Rs. 9 were left over. How much money did he have and how many persons were there?

OR

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.

Q.27 Prove that: $(\sin A + \operatorname{cosec} A)^2 + (\cos A + \sec A)^2 = 7 + \tan^2 A + \cot^2 A$

Q.28 Given that √5 is irrational, prove that $2 + 3\sqrt{5}$ is irrational.

Q.29 Two coins are tossed simultaneously. What is the probability of getting

(i) At least one head?   (ii) At most one tail?   (iii) A head and a tail?

Q.30 If a circle touches the side BC of a triangle ABC at P and extended sides AB and AC at Q and R, respectively, prove that $AQ = \frac{1}{2}$ (BC + CA + AB)
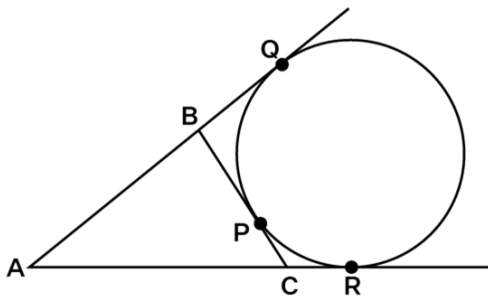
OR

If AB is a chord of a circle with centre O, AOC is a diameter and AT is the tangent at A as shown in Figure. Prove that ∠BAT = ∠ACB
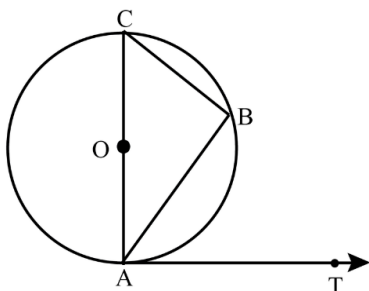
SECTION – D
Questions 32 to 35 carry 5 marks each.

Q.31 Preet has two slices of pizza in triangular shape as shown in figure. Let us mark them *ABC* and *PQR*.
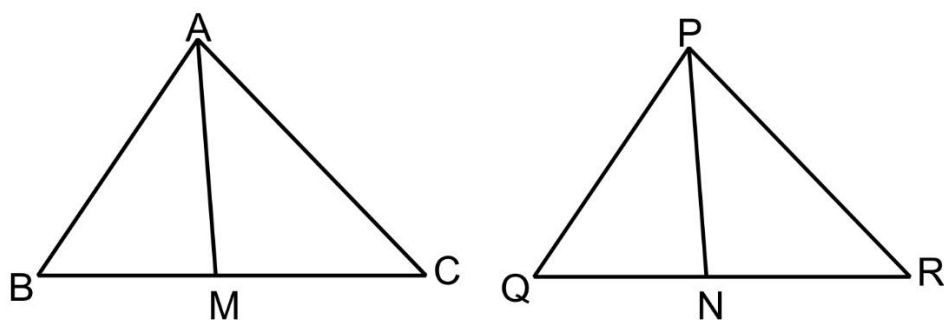
AM and PN are respectively the bisectors of ∠BAC and ∠QPR such that M and N lie on sides BC and QR of △ABC and △PQR respectively. If △ABC∼△PQR. Show that:

(a) △MBA∼△NQP   (b) $\frac{AM}{PN} = \frac{AB}{PQ}$ (c) △MAC∼△NPR

OR

In figure, AD and BE are respectively perpendiculars to BC and AC. Show that:
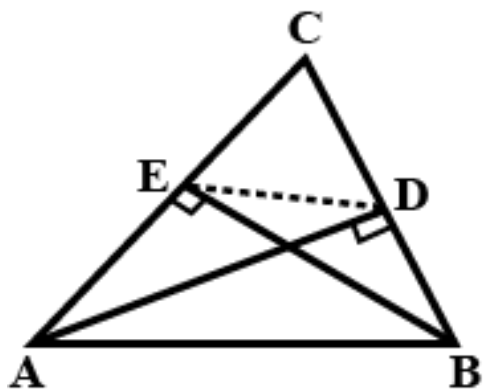
(a) △ADC∼△BEC   (b) CA×CE=CB×CD   (c) △ABC∼△DEC   (d) CD×AB=CA×DE

Q.32 A cubical block of side 10 cm is surmounted by a hemisphere. What is the largest diameter that the hemisphere can have? Find the cost of painting the total surface area of the solid so formed, at the rate of Rs. 5 per 100 sq. cm. [Use π = 3.14]

OR

Due to heavy floods in a state, thousands were rendered homeless. 50 schools collectively decided to provide place and the canvas for 1500 tents and share the whole expenditure equally. The lower part of each tent is cylindrical with base radius 2.8 m and height 3.5 m and the upper part is conical with the same base radius, but of height 2.1 m. If the canvas used to make the tents costs ₹120 per m2, find the amount shared by each school to set up the tents.

Q.33 The median of the following data is 868. Find the values of x and y, if the total frequency is 100

Class	Frequency
800 – 820	7
820 – 840	14
840 – 860	x
860 – 880	25
880 – 900	y
900 – 920	10
920 – 940	5

Q.34 A train covered a certain distance at a uniform speed. If the train would have been 6 km/h faster, it would have taken 4 hours less than the scheduled time. And, if the train were slower by 6 km/hr; it would have taken 6 hours more than the scheduled time. Find the length of the journey.

OR

In a flight of 600 km, an aircraft was slowed due to bad weather. Its average speed for the trip was reduced by 200 km/hr and time of flight increased by 30 minutes. Find the original duration of flight.

SECTION – E (Case Study Based Questions)
Questions 36 to 38 carry 4 marks each.

Q.35 **Case Study – 1**

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. 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.
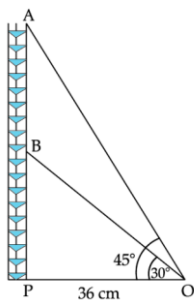
Distance between the base of the tower and point O is 36 cm. From point O, the angle of elevation of the top of the Section B is 30° and the angle of elevation of the top of Section A is 45°. Based on the above information, answer the following questions:

(i) Find the length of the wire from the point O to the top of section B. (1)

(ii) Find the distance AB. (2)

OR

Find the area of ΔOPB.

(iii) Find the height of the Section A from the base of the tower. (1)

Q.36 **Case Study-2**

The school auditorium was to be constructed to accommodate at least 1500 people. The chairs are to be placed in concentric circular arrangement in such a way that each succeeding circular row has 10 seats more than the previous one.
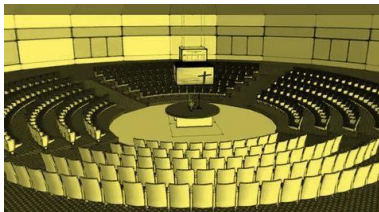
(i) If the first circular row has 30 seats, how many seats will be there in the 10th row? (1)

(ii) For 1500 seats in the auditorium, how many rows need to be there? (2)

OR

If 1500 seats are to be arranged in the auditorium, how many seats are still left to be put after 10th row? (2)

(iii) If there were 17 rows in the auditorium, how many seats will be there in the middle row? (1)

Q.37 **Case Study-3**

The diagrams show the plans for a sun room. It will be built onto the wall of a house. The four walls of the sunroom are square clear glass panels. The roof is made using

• Four clear glass panels, trapezium in shape, all the same size

• One tinted glass panel, half a regular octagon in shape
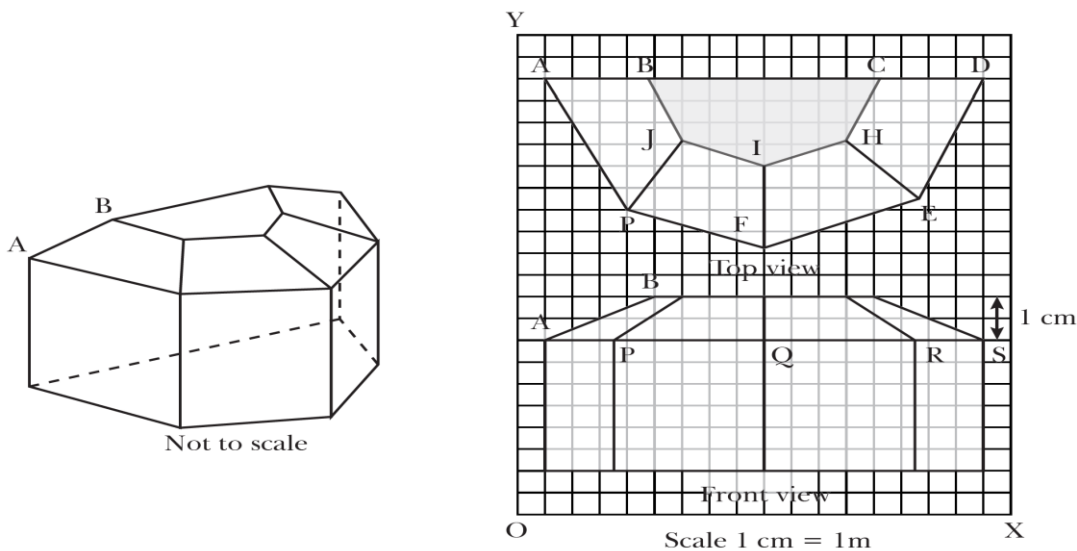
(i) Find the mid-point of the segment joining the points J (6, 17) and I (9, 16). (1)

(ii) Find the distance between the points A and S. (1)

(iii) Find the co-ordinates of the point which divides the line segment joining the points A and B in the ratio 1:3 internally. (2)

OR

If a point (x,y) is equidistant from the Q(9,8) and S(17,8),then find the relation between x and y. (2)

SCIENCE
SECTION-A

Q.1 The graph below shows the variation of average pressure exerted by blood when it flows in the body.
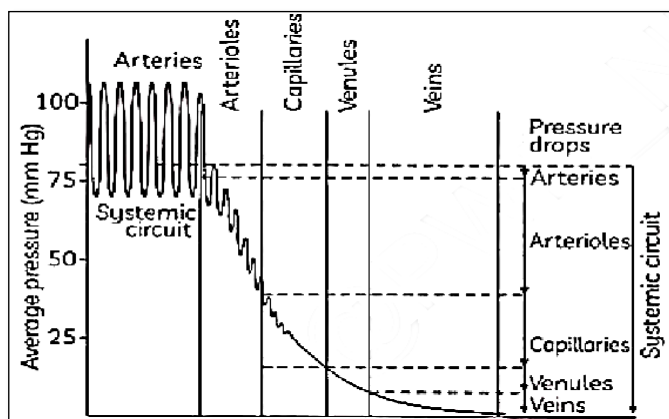


A student analyzed the above graph and noted the following observations:

(i) The force exerted by blood on walls of arteries is greater than in veins.

(ii) The force exerted by blood on walls of veins is greater than in arteries.

(iii) systolic pressure is the pressure of blood in the artery during contraction of ventricles.

(iv) Diastolic pressure is the pressure of blood in the veins during relaxation of ventricles.

Select the correct observations:

(a) only (i) (b) both (ii) and (iii) (c) both (i) and (iii) (d) both (ii) and (iv)

Q.2 Suresh performed the following activity: He took 3 mL of sodium sulphate solution in a conical flask (or test tube) and added 3 mL of barium chloride solution.
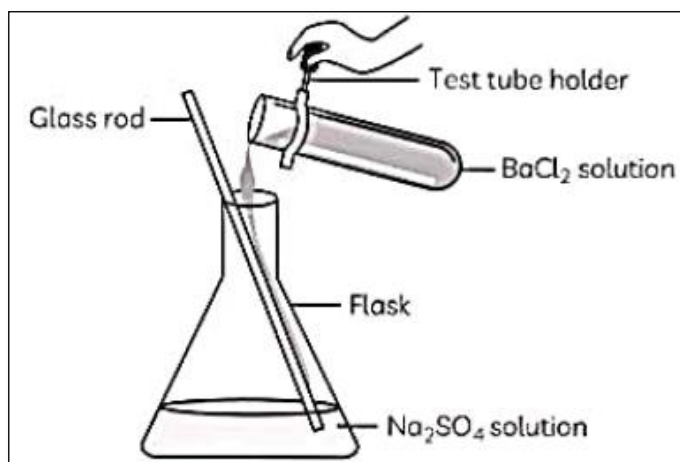
He noted down the following observations. Identify, which observation is correct from the options given below:

	Observation	Chemical equation of reaction taking place
(a)	No visible change observed as both the products formed are soluble in water.	$Na_2SO_{4(aq)} + BaCl_{2(aq)}$ $\rightarrow BaSO_{4(aq)} + 2NaCl_{(aq)}$
(b)	A white precipitate of sodium chloride is formed as barium sulphate is soluble in water.	$Na_2SO_{4(aq)} + BaCl_{2(aq)}$ $\rightarrow BaSO_{4(aq)} + 2NaCl_{(s)}$
(c)	A white precipitate of barium sulphate is formed as sodium chloride is soluble in Water.	$Na_2SO_{4(aq)} + BaCl_{2(aq)}$ $\rightarrow BaSO_{4(s)} + 2NaCl_{(aq)}$
(d)	White precipitates of barium sulphate and sodium chloride formed as both are insoluble in water.	$Na_2SO_{4(aq)} + BaCl_{2(aq)}$ $\rightarrow BaSO_{4(s)} + 2NaCl_{(s)}$

Q.3   In photosynthesis, which structures are used up, which are produced and which are necessary, but remain unchanged after the reaction?

	Used up	Produced	Remain unchanged
(a)	Carbon dioxide	Water	Oxygen
(b)	Chlorophyll	Carbon dioxide	Water
(c)	Oxygen	Starch	Cellulose
(d)	Water	Oxygen	Chlorophyll

Q.4   Mehak noted the differences between blood and lymph in the following table. Select the row containing INCORRECT information.

		Blood	Lymph
(a)	Colour	Red due to presence of only RBCs	Colourless due to presence of only WBCS
(b)	Components	Plasma, RBC, WBC and platelets	Plasma and less number of WBCS
(c)	Other name	Also called tissue fluid	Also called extracellular fluid
(d)	Flow	It flows through blood capillaries	It flows through arteries

Q.5   Atul studied the following graph.
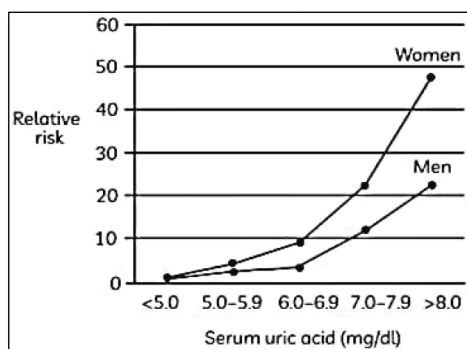
After studying the graph, he noted down the following observations.

(I)   The serum uric acid level is same for both men and women for risk below 10.

(II) Serum uric acid level should be under 8.0 mg/dl for both men and women for relative risk below 10.

(III) The normal serum uric acid level is more for women and less for men for the same relative risk.

(IV) The normal serum uric acid level is more for men and less for women for the same relative risk.

Select the correct observations made by him:

(a) Only (11) (b) Both (1) and (IV) (c) Both (II) and (III) (d) Both (1) and (III)

Q.6 Observe the reaction shown:
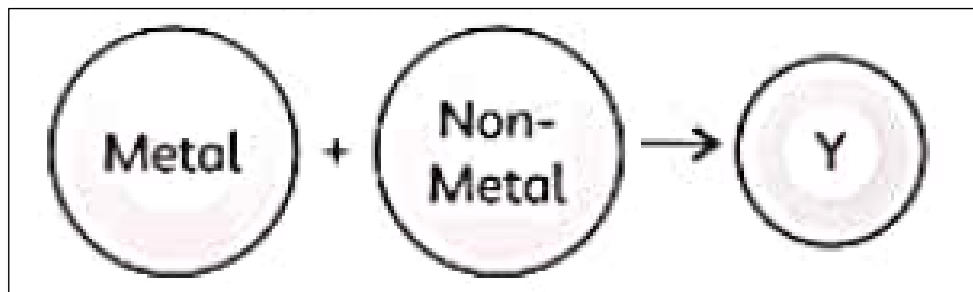
Will Y dissolve in an organic solvent or NOT?

(a) Yes (b) No

(c) Insufficient information (d) Dissolve sometimes

Q.7 Prism ABC is positioned in various directions with BC serving as its base. As depicted in the figure, a small white light beam is incident on the prism. Which of the following situations, after dispersion, has the third colour from the top matching the sky's colour?
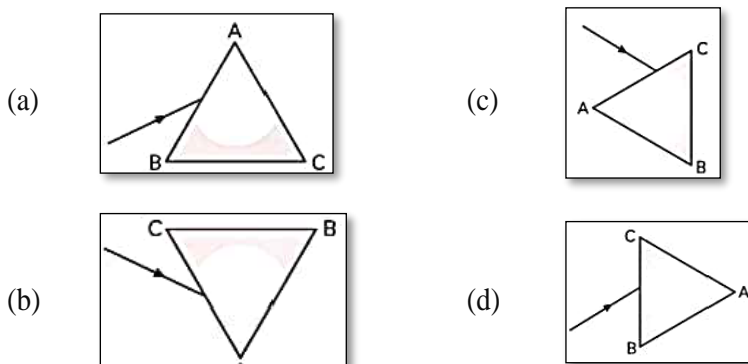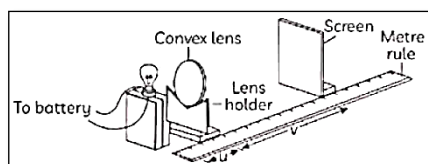

Q.8 Figure shows a ray of light as it travels from medium A to medium B.
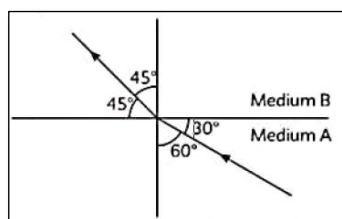
Refractive index of medium B relative to medium A is:

(a) $\dfrac{\sqrt{3}}{\sqrt{2}}$ (b) $\dfrac{\sqrt{2}}{\sqrt{3}}$ (c) $\dfrac{1}{\sqrt{2}}$ (d) $\sqrt{2}$

Q.9 Rohini arranged the following apparatus for finding the focal length and also power of a convex lens.

The reading are tabulated below:

Object distance, u (cm)	Image distance, v (cm)	$\frac{1}{u}$ cm^{-1}	$\frac{1}{v}$ cm^{-1}	$\frac{1}{u}+\frac{1}{v}$ cm^{-1}
40.0	24.0	0.025	0.042	0.067
35.0	26.3	0.029	0.038	0.067
30.0	30.0	0.033	0.033	0.066
25.0	37.5	0.040	0.027	0.067
20.0	60.0	0.050	0.017	0.067
18.0	90.0	0.056	0.011	0.067

She plotted a graph between $\frac{1}{u}$ and $\frac{1}{v}$.
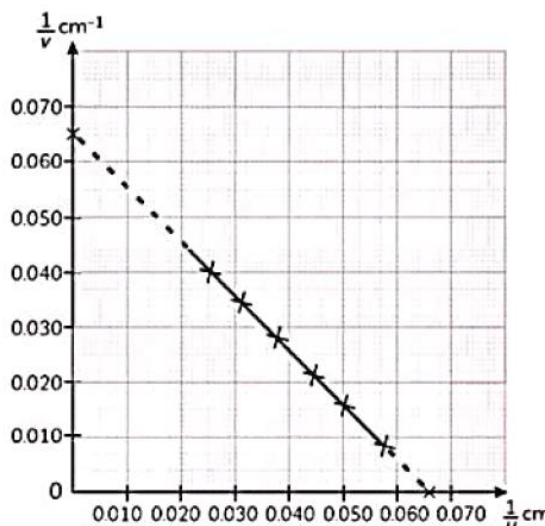
The approximate value of power of the lens is:

(a) + 15D (b) – 15 D (c) + 6.7 D (d) – 6.7 D

Q.10 The graph between power dissipated and current flowing is drawn below:
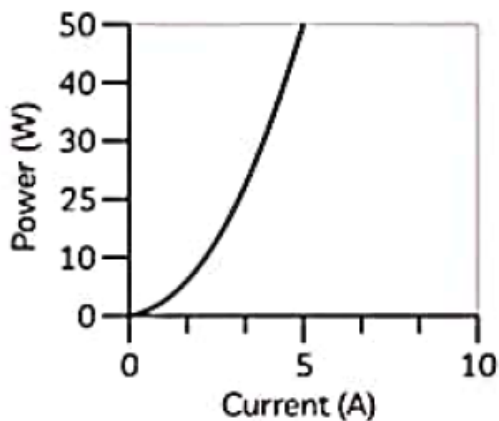
From the graph, the resistance is calculated and it is equal to:

(a) 10 Ω (b) 5 Ω (c) 2 Ω (d) 1 Ω

Q.11 Select a reason why farmers prefer vegetative propagation for growing crops:

(a) Seedless crops can also be reproduced.

(b) Offspring plants are genetically similar to parent plants.

(c) Plants grown by vegetative propagation bear fruits earlier.

(d) Vegetative propagation does not depend on external agents of pollination.

Q.12 Reproduction in starfish takes place by fission or through autotomy of arms. In fission, the central disc breaks into two pieces and each portion then regenerates the missing parts. In autotomy, an arm is shed with part of the central disc attached, which continues to live independently as a "comet", eventually growing a new set of arms.


Offspring formed by the above method of reproduction have greater similarity among themselves because:

(I) asexual reproduction involves only one parent.

(II) asexual reproduction does not involve gametes.

(III) sexual reproduction occurs before a sexual reproduction.

(IV) asexual reproduction occurs before sexual reproduction.

Options:

(a) (I) and (II)   (b) (I) and (III)   (c) (II) and (IV)   (d) III and (IV)

Q.13 The oxide formed in the reaction shown below dissolves in dilute hydrochloric acid.
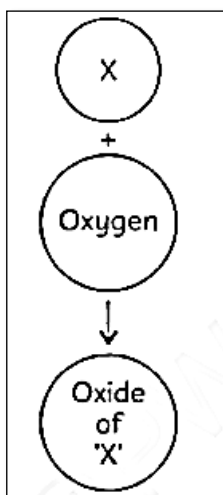
The oxide formed also turns a solution of red litmus blue. What is the element "X?

(a) Metal   (b) Non-metal   (c) Metalloid   (d) Non-conductor

Q.14 Match column I with column II and select the correct option from the codes given below:

Column I	Column II	
(A) Plasma	(i)	Fragments of cells that do not possess nuclei.
(B) RBCs	(ii)	Responsible for the production of antibodies.
(C) Platelets	(iii)	Contains a lot of water and many proteins.
(D) WBCS	(iv)	Red coloured pigment haemoglobin, due to which the blood appears red.

Codes:

(a) (A)-(iii); (B)-(iv); (C)-(i); (D)-(ii)

(b) (A)-(i); (B)-(iv); (C)-(ii); (D)-(iii)

(c) (A)-(ii); (B)-(iii); (C)-(iv); (D)-(i)

(d) (A)-(iv); (B)-(i); (C)-(ii); (D)-(iii)

Q.15 Select the INCORRECT statements.

   (I) Arteries carry blood away from the heart to different body organs.

   (II) Arteries have thin, elastic walls.

   (III) Veins collect blood from different body organs and bring it back to heart.

   (IV) Veins have thick walls.

   Options:

   (a) Both (I) and (II)   (b) Both (II) and (IV)   (c) Both (I) and (III)   (d) Both (II) and (III)

Q.16 Which of the following describes the flow of energy absorbed by the producers to the average amount of energy absorbed by the primary consumers?

   (a) Bidirectional and cyclic   (c) Cyclic and bidirectional

   (b) Unidirectional and cyclic   (d) Cyclic and unidirectional

Q.No. 17 to 20 consist of two statements Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

(a)   Bath (A) and (R) are true, and (R) is the correct explanation of (A).

(b)   Both (A) and (R) are true, and (R) is not the correct explanation of (A).

(c)   (A) is true, but (R) is false.

(d)   (A) is false, but (R) is true.

Q.17 **Assertion (A):** Carbon forms strong bonds with other elements making these compounds exceptionally stable.
   Reason (R): The formation of strong bonds by carbon is due to its small size.

Q.18 **Assertion (A):** Electrical impulses are used by neurons to transmit messages across the junction.
   Reason (R): Synapse refers to the intersection or space between two points. Neurotransmitters are released as chemicals when an electrical signal reaches its terminal.

Q.19 **Assertion (A):** Positive phototropism is as a movement defined toward light.
   Reason (R): The auxin diffuses toward the sunny side of the shoot when sunlight hits a particular side of the plant. Cells are stimulated to grow longer by auxin concentration, and a stem that is bent toward the sun is produced.

Q.20 **Assertion (A):** The flow of energy in an ecosystem is unidirectional.
   Reason (R): Green plants in a terrestrial ecosystem capture about 10% of the energy of sunlight that falls on their leaves.

SECTION-B
(Q. No. 21 to 26 ore very short answer questions.)

Q.21 The cartoon below addresses a health concern in children.

Write the possible cause for this concern. Provide some measures that could be taken in order to prevent the shown concern?
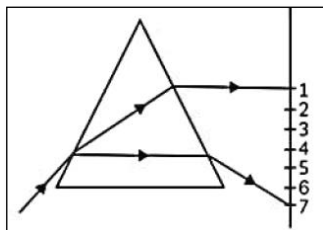
Q.22 (A) Write the molecular formula of first two members of homologous series having functional group-CI

(B) Two non-metal atoms combine with each other and form X_2.

(i) What type of chemical bond is present in X_2?

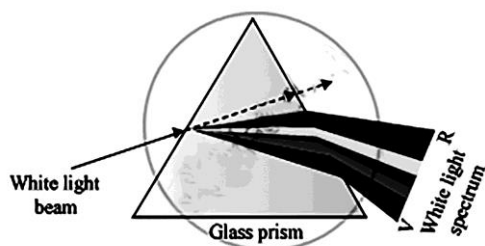(ii) State whether X_2, will have high or low melting point.

Q.23 Sonali passed a white light through a prism to yield a spectrum.

(A) The ray of which colour will show the maximum angle of deviation and which one will show the least angle of deviation?

(B) A blue-coloured ray is passed through a glass prism. What will be the colour of the emergent ray? Justify your answer.

OR

Study the above diagram showing white light spectrum and identify the phenomenon. What is the reason for the red light to bend the least as compared to the violet light?

Q.24 Differentiate between arteries and veins on the basis of following points:

S. No.	Feature	Arteries	Veins
(1)	Wall thickness		
(2)	Valves		

Q.25 In a Science practical exam, Priyal took a blue-colored solution of the sulphate salt of metal W in a beaker. Successively, metal powders X, Y, and Z were added to it. Various colour changes were observed in the solution during the experiment.
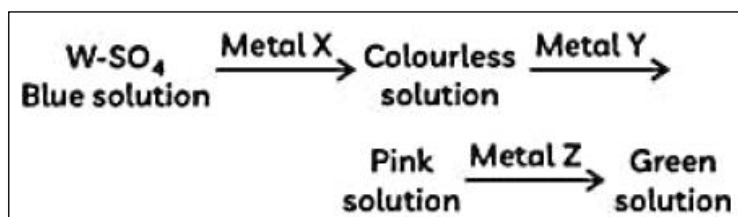
State what colour change, if any, will occur if metal X is again added to the green solution in the beaker. Give reason for your answer.

OR

Suhana was given a metallic element, M, which exhibits the following characteristics:

(i)   It floats on water.

(ii) It can be cut with a knife.

(iii) It occurs naturally as its chloride, of formula MCI.

(iv) Its oxide dissolves in water to form the hydroxide.

   (A) State the method of manufacture of the metal M.

    (B) Name the major byproduct obtained in the process.

Q.26 The chromosome number of zygote, embryonal cells and adult of a particular organism is always constant. How is the constancy maintained in these three stages?
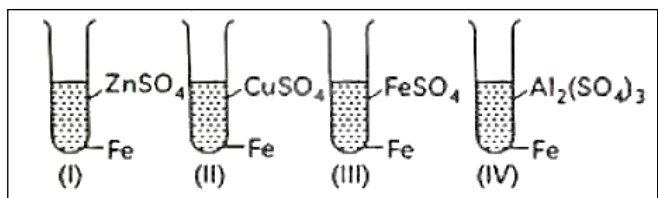
SECTION-C

(Q. No. 27 to 33 are short answer questions.)

Q.27 Rita has drawn an electric circuit to study Ohm's law as shown in the figure:
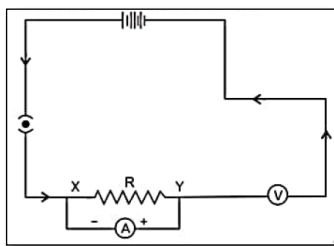
Her teacher told that the circuit diagram needs correction. Help Rita in identifying errors in the above figure and redraw it

Q.28 Sakshi was comparing the reactivity of different metals for her science project. She added iron filings in four test tubes (1), (II), (III) and (IV) containing aqueous solutions of $ZnSO_4$, $CuSO_4$, $FeSO_4$, and $Al_2(SO_4)_3$ respectively as shown in the figure:

(A) In which of the test tubes she will observe the reaction to be most vigorous?

(B) What is the reason for her observation?

(C) Write a well-balanced equation of the reaction in (II).

OR

(A) When Reshma kept the dry pellets of a base 'X' in the open, they absorbed moisture and turned sticky. This compound is also formed by Chlor alkali process. Help Reshma in writing the chemical name and formula of the compound X.

(B) Also, describe the Chlor-alkali process with the help of a balanced chemical equation.

(C) Name the type of reaction that occurs when X is treated with dilute hydrochloric acid and write the chemical equation.

Q.29 Mohan had been complaining of frequent weight loss, leg pain and frequent urination. He went to the doctor right away. The physician determined that Mohan had high blood sugar levels. To keep his blood sugar levels within the normal range, he should watch what he eats and exercise frequently.

(A) Identify the illness he has been suffering from and the hormone whose shortage is responsible for the same.

(B) Name the gland that secretes it and describe this hormone's purpose.

(C) Describe how the human body controls the amount and timing of this hormone's secretion.

Q.30 In the formation of the compound A_2B, atoms of A lose one electron each while atom of B gained two electrons. Show the formation of the compound A_2B and write the nature of bond present. Predict any two properties of A_2B.

Q.31 Person A has only B chromosomes in all its gametes. On the other hand, another person Chas chromosome D in half of gametes and chromosome E in another half of gametes. When chromosomes B and D combine during fertilisation, a female zygote results. On the other hand, combination of B and E chromosomes produces a male zygote. What are chromosomes B, D and E? Analyse the given information and provide reason for your answer.

Q.32 (A) Why does a ray passing through the centre of curvature of a concave mirror retraces its path?

(B) Draw the given diagram in your answer book and complete it for the path of a ray of light after passing through the lens.
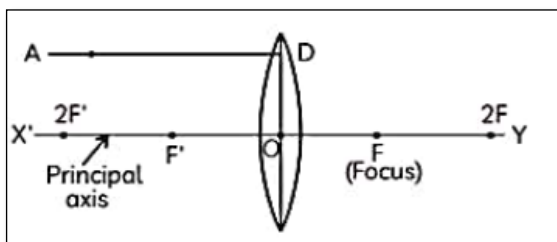
Q.33 What do you understand by biological magnification? Which trophic level organisms would have highest concentration of chemicals? Give reason for your answer.

## SECTION-D

(Q. No. 34 to 36 are long answer questions.)

Q.34 Given below are certain situations. Analyse and describe what happens when:

(A) Gypsum is heated at 373 K.

(B) Blue crystals of copper sulphate are heated.

(C) Excess of carbon dioxide gas is passed through lime water.

(D) Zinc granules are heated with sodium hydroxide solution.

(E) Dilute HCl is added to sodium hydragen carbonate.

OR

Salts of strong acid and strong base pH value of 7, making them salts of a strong base and neutral. While basic in nature and have a pH value more than 7, those of a strong acid and a weak base are acidic and have a pH value less than 7.

(A) Based on the above information, classify the following as strong bases and weak bases
   KOH, NaOH, CsOH, NH$_4$OH.

(B) (i) What happens when strong acids and bases react with each other?
   (ii) Provide a chemical reaction for case (i).

(C) Write a reaction of a strong acid and a weak base?

(D) Identify the following as strong acid: CH$_3$COOH, H$_2$SO$_4$ HNO$_3$, H$_3$PO$_4$ H$_2$CO$_3$, HCL

(E) Classify the following acids as strong or weak acid: acetic acid, citric acid, tartaric acid, oxalic acid.

Q.35 Sita recently learned about a method called 'X' in her Science class. This method involves certain higher plants reproducing by generating new plants from their vegetative parts, such as stems, roots, or leaves, instead of relying on seeds as shown in the given figure.
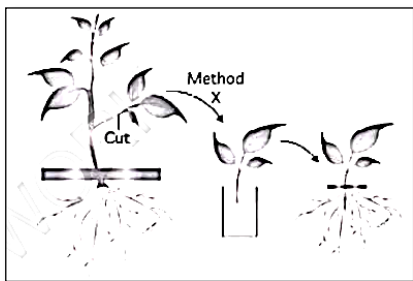
(A) Identify the method X.

(B) Briefly explain three advantages of using this process for growing certain types of plants.

(C) Select two plants from the following list that are commonly propagated using this method: Banana, Wheat, Mustard, Jasmine, Gram.

OR

(A) Which process will likely to be disturbed, if the part labelled as (P) is removed from the flower?
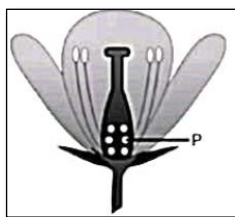
(B) (i) Name the reproductive parts of an angiosperm. Where are these parts located?
   (ii) Explain the structure of its fernale reproductive parts with the help of a labelled diagram.

Q.36 Siddhant fixes a sheet of white paper on a drawing board. He places a bar magnet in its centre and sprinkles some iron filings uniformly around the bar magnet. Then he taps the board gently and observes that the iron filings arrange themselves in a particular pattern as shown in the figure below:
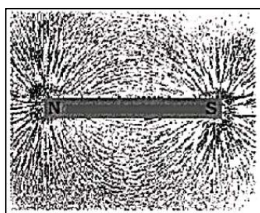
(A) Why do the iron filings arrange in a pattern?

(B) What do the lines along which the iron filings align represent?

(C) What does the crowding of iron filings at the end of the magnet indicate?

(D) List any four properties of magnetic field lines.

OR

AB is a current carrying conductor in the plane of the paper as shown in figure.
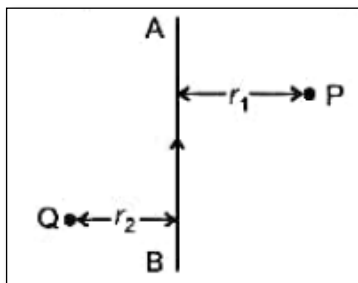
(A) What are the directions of magnetic fields produced by it at points P and Q?

(B) State the rule to find direction of magnetic field around a current carrying conductor.

(C) Draw a diagram showing the pattern of magnetic field.

(D) Given $r_1 > r_2$ where will the strength of the magnetic field be larger? Give reason for your answer.

SECTION – E

(Q. No. 37 to 39 are case - based/data -based questions with 2 to 3 short sub - parts.
internal choice is provided in one of these sub-parts)

Q.37 Sanjano's grandmother shared that homemade vinegar is made by starting with wine, which is poured into a clean glass jar and vigorously shoken to aerate it. Water is then added and thoroughly mixed to continue the deration process. The jar is sealed and placed in a dark area at room temperature, where it is left undisturbed for about 3 to 4 weeks to undergo natural fermentation, transforming the wine into vinegar.

(A) Based on the atoms getting added/ removed when wine is converted to vinegar, name the type of reaction that happens.

(B) Sodium bicarbonate reacts with Y to form CH_3COONa and a gas W (which is used in carbonated beverages to prevent the bacterial and fungal growth) along with water.

$$NaHCO_3 + \boxed{Y} \rightarrow CH_3COONa + \boxed{W} + H_2O$$
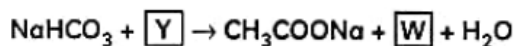
Identify Y and W.

(C) Name two chemical reagents that would be used for the same reaction if it is carried out in the laboratory.

OR

Name the functional group of the main organic compound present in wine and vinegar.

Q.38 Total internal reflection is defined as the phenomenon which occurs when the light rays travel from a more optically denser medium to a less optically denser medium. Consider a ray of light passing from a medium of water to that of air. Light ray will be refracted at the junction separating the two media. Since it passes from a medium of a higher refractive index to that having a lower refractive index, the refracted light ray bends away from the normal. At a specific angle of incidence, the incident ray of light is refracted in such a way that it passes along the surface of the water. This particular angle of incidence is called the critical angle as shown in the figure below:
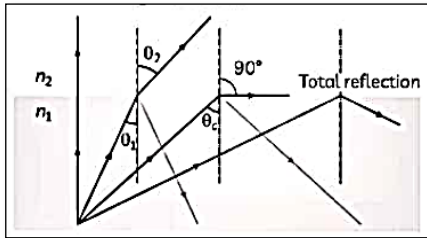
When the angle of incidence is greater than the critical angle, the incident ray is reflected back to the medium. We call this phenomenon as total internal reflection. An application of this phenomenon is found in optical fibres.

An optical fibre consists of

(A) Core Thin glass center of the fiber where the light travels.

(B) Cladding Outer optical material surrounding the core that reflects the light back into the core.

(C) Buffer coating Plastic coating that protects the fiber from damage and moisture.

The core has higher refractive index than the cladding When the incident ray fails on the cladding, it suffers total internal reflection as the angle formed by the ray is greater than the critical angle.
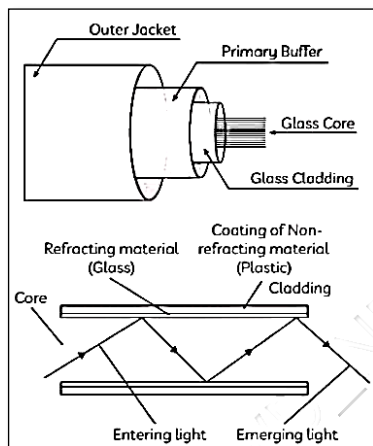
(A) How will the speed of light change when light is incident on cladding of an optical fibre?

(B) If materials core and cladding are switched then can we use the optical fibre for long distance transmission?

(C) In the following figure, if angle $\theta = 30°$ then find the maximum refractive index of cladding.
(Given $n_{core} = 1.5$)
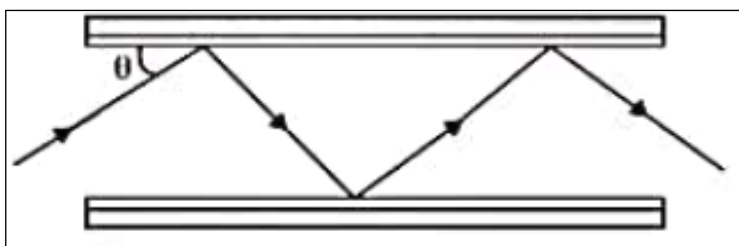

OR

What are the two conditions for total internal reflection of light?

Q.39 We all are aware of the heating effects of electric current. The heat is produced in a conductor due to the collision of electrons in the conductor. I love you ever wondered about the amount of heat generated during the flow of current through a wire and the parameters and conditions it is based upon?

It was the English physicist James Prescott Joule who discovered in 1840 that the amount of heat per second that develops in a wire carrying a current is proportional to the electrical resistance of the wire and the square of the current. He determined that the heat evolved per second is equivalent to the electric power absorbed, or the power loss.
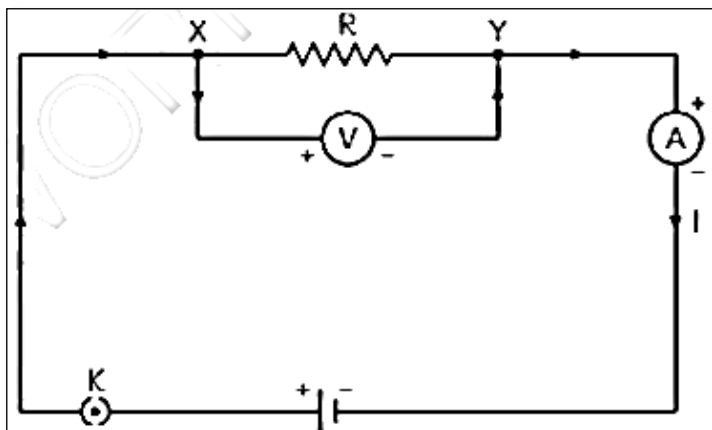
(A) How is the heat produced in a resistor related to 'I', 'R' and 't' according to Joule's law of heating?

(B) Find the heat energy produced in resistance of 5 Ω when 3 A current flows through it for 2 minutes.

(C) Two conducting wires of the same material and of equal lengths and equal diameters are first connected in series and then in parallel in a circuit across the same potential difference. What is the ratio of heat produced in series and parallel combination?

OR

(C) If the heat produced in each second in a 82 resistance is 800 J, find the potential difference across the resistor.

SOCIAL SCIENCE
SECTION–A
This section has 20 multiple choice questions (Q. No. 1-20). All questions are compulsory.

Q.1 If the price of pump-sets went up due to increase in the tax by the government, Profit of farmers will reduce. This is an example of:
(a) Primary sector dependent on Tertiary
(b) Secondary sector depend on primary
(c) Primary sector depend on secondary
(d) Secondary sector depend on tertiary

Q.2 Arrange the statement in correct sequence:
(i) The Vernacular Press Act was passed in India.
(ii) Religious reformer Martin Luther printed 'Ninety-Five Theses'.
(iii) Johann Gutenberg invented the Printing Press.
(iv) The Roman Church began maintaining an index of prohibited books.
Options:
(a) (iv) - (ii) - (iii) - (i)
(b) (ii) - (iv) - (i) - (iii)
(c) (iii) - (iv) - (i) - (ii)
(d) (i) - (ii) - (iii) - (iv)

Q.3 Statement I- India stands second as a world producer of sugar but occupies the first place in the production of gur.

Statement II- 80% sugar mills are in Uttar Pradesh and Bihar.

(a) Statement I and II are false.

(b) Statement I and II are true.

(c) Statement I is false and statement II is true.

(d) Statement I is true and statement II is false.

Q.4 Kareena provided her friends with details about a significant colonial-era legislation:-

– The act granted the government the authority to arrest an individual without a trial.

– This legislation led to widespread protests and the Jallianwala Bagh tragedy.

Which legislation is Kareena referring to?

(a) Government of India Act, 1919   (c) Rowlatt Act

(b) Indian Penal Code   (d) Simon Commission

Q.5 Identify the crop with the help of the following information

I. It is a non food crop

ii. It is equatorial crop, but under the special conditions it is also grown in tropical and sub-tropical areas.

iii. It requires moist and humid climate with rainfall of more than 200 cm and temperature above 25°C.

iv. It is an important industrial raw material.

     (a) Wheat   (b) Sugarcane   (c) Tea   (d) Rubber

Q.6 Shriya wants to write about the 1929 INC session of Lahore but has forgotten the reason for its popularity and significance in the Indian National Movement. Which of the following is the reason behind the popularity of this session of the Indian National Congress?

(a) Declaration of the Non-cooperation movement

(b) Declaration of achievement of Independence

(c) Declaration of the Purna Swaraj Resolution

(d) Calling off of Non-Cooperation Movement

Q.7 Match Column A and Column B and select the correct answer using the codes below in the lists:

Column A	Column B
(A) Accountable Government	(I) Ensures equality and justice in society
(B) Economic Development	(II) Responds to the needs and expectations of citizens
(C) Reduction of Inequality	(III) Citizens have the freedom to participate in decision-making
(D) Transparency and Participation	(IV) Affects the well- being and growth of a nation

(a) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)   (c) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

(b) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)   (d) (A)-(II), (B)-(IV), (C)- (I), (D)-(III)

Q.8 _____is represented by the symbol of an elephant and significantly present in Uttar Pradesh.

Options:

(a) Indian National Congress   (c) National People's Party

(b) Bhartiya Janta Party   (d) Bahujan Samajwadi Party.

Q.9 Which of the following statements describe(s) the features of the aluminium smelting industry in India and its contribution to the national economy?

I. Aluminium smelting process is carried out using bauxite.

II. Odisha is a hotspot for aluminium smelting plants.

III. The process employed in converting alumina into aluminium makes use of coal.

IV. The aluminium smelting industry is the third most important metallurgical industry in India.

Options:

(a) Statements (II) and (IV) are true.   (c) Statement (I) is true.

(b) Statements (I) and (III) are true.   (d) Statement (IV) only

Q.10 Overgrasing is the main reason behind land degradation in which of the following states?

(a) Maharashtra   (c) Punjab

(b) Chhattisgarh   (d) Western Uttar Pradesh

Q.11 You are a worker who is suffering from underemployment. You work in a shop which has 6 other employees. You have a very meagre income. One day, the local MLA visits your shop to understand the issues you have been facing since your worker union has been protesting for more wages from some time. He asks you to define underemployment. Which of the following statements can best describe this phenomenon?

(I) Workers are not paid as per their work.

(II) Workers are working less than what they are capable of doing.

(III) Workers are not skilled.

(IV) Workers are not willing to work.

Options:

(a) Statements (I) and (II) only   (c) Statement (II) only

(b) Statements (II) and (III) only   (d) Statement (IV) only

Q.12 Which of the following is regulated by the institution featured in the picture?

(a) Formal Sector loans   (c) Prices for groceries

(b) Informal Sector loans   (d) Interest rates of the World Bank

Q.13 The Huns are traders from ancient times, seeking to transport valuable goods such as spices and silk from China to the Mediterranean. Such a venture involves crossing diverse landscapes and even political boundaries along the silk routes. On their way, they exchange stories and details about prevalent customs with the locals they find. Which of the following statements is the best way to describe this exchange?

(I) Globalisation was carried out through the formation of supply chains in ancient times.

(II) Exchange of ideas and culture always accompanied trade along the silk routes.

(III) Diffusion of beliefs from one civilisation to another could be carried out only through trade.

(IV) Cultural exchange was the best way to conquer nations and establish colonies.

Options:

(a) Statements (I) and (II) only

(b) Statements (II) and (III) only

(c) Statement (II) only

(d) Statement (IV) only

Q.14 How can we increase the proportion of women in important political and social institutions of the country?

(a) By educating women to participate more

(b) By declaring separate electorates for them

(c) By reserving seats for them

(d) By making these institutions open only for females

Q.15 Interpret the following graph and choose the correct option for the following question:

GDP by Primary, Secondary and Tertiary Sectors
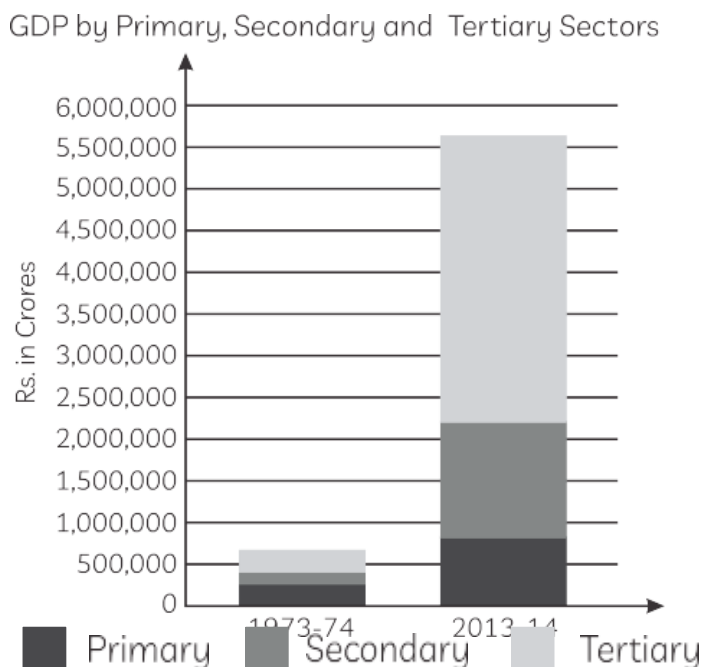
Which is the most important sector in terms of its contribution to the GDP in 1973?

(a) Primary Sector

(b) Secondary Sector

(c) Tertiary Sector

(d) Both Primary and Tertiary Sector

Q.16 Evaluate which of the following statements about the impact of print culture on the French Revolution are correct by identifying the appropriate option:

(a) Print culture popularised enlightenment ideas by criticising tradition and despotism.

(b) Print created a new culture of dialogue and debate.

(c) Literature mocking the royalty and criticising their morality raised questions

(d) Print directly shaped people's minds and made them reject monarchical and Church propaganda.

Options:

(i) Statements (I), (II), and (III) are correct.   (iii) Statements (II) and (IV) are correct.

(ii) Statements (I) and (III) are correct.   (iv) Statements (I), (II), (III) and (IV)

Q.17 Entry of an MNC in a domestic market can:

(a) improve choices   (c) shut it down

(b) deteriorate choices   (d) turn it into a factory

Q.18 Which institution makes the indirect governance of a vast country like India possible?

(a) Political Parties   (c) Election Commission

(b) Judiciary   (d) Media

Q.19 Consider the following statements about how information technology has facilitated globalisation and choose the correct answer.

Statement I: The development of high-speed internet connections governments encourages access to global platforms and facilitates cross-border communication.

Options:

(a) Statement (I) is correct and (II) is incorrect.

(b) Statement (I) is incorrect and (II) is correct.

(c) Both (I) and (II) are incorrect.

(d) Both (I) and (II) are correct.

Q.20 The principle of majoritarianism led to civil war in_____.

(a) Belgium   (b) Sri Lanka   (c) Netherlands   (d) Germany

SECTION – B

(Very Short Answer Questions)

Q.21 'Foreign clothes were boycotted because they were seen as the symbol of western economic and Cultural domination.' Provide evidence to support this statement.

Q.22 'Unlike many industries, the textile sector often boasts about complete value chains.' Substantiate this assertion and enlist any two features of the textile industry.

OR

The strategic choice of industrial location involves considerations beyond geographical convenience. Justify the given statement.

Q.23 In a discussion between Raj and his parents, the topic of per capita income comes up. Raj asks his Mother about whether his father's per capita income is his real income. What is per capita income? Can

per capita income be considered the real income of a citizen? Justify your answer.

Q.24 'The creation of linguistic states affected the unity of the country.' Justify by giving two examples.

SECTION-C
(SHORT ANSWER TYPE QUESTIONS)

Q.25 'Transparency is upheld within a democratic system.' Explain the statement by giving suitable examples.

Q.26 Aasha and Rohan both need to borrow money to buy a car. Aasha decides to borrow 12 lakh from a bank, while Rohan borrows the same amount from a close relative. Suggest any three differences between the two sources of credit in this situation. Identify the potential advantages and disadvantages for both of them in terms of repayment, interest rates, and the overall dynamics of the borrowing process?

OR

It is essential that banks and cooperatives extend more credit, especially in rural regions. Explain this in three points.

Q.27 Shriya was solving a questionnaire about various nationalist movements which have taken place across the world. She reads a question about the impact and causes of Greek war of Independence. The question claims that the Greek war of Independence contributed to a broadened movement of self-determination. Should she support the statement? Analyse the causes and consequences of Greek war of Independence.

Q.28 Write about any three hydraulic structures constructed in ancient India.

Q.29 'Gandhiji organised first satyagraha in 1917 in Champaran and Kheda and then later in 1918 in Ahmedabad for cotton mill workers.' Give any three reasons to prove the statement.

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

Q.30 'Printing play a major role in making scientific and philosophical ideas more accessible to the common public during the eighteenth century.' Justify with suitable answer.

OR

Latika is a historian who is invited to speak at a conference on the impact of print culture in shaping modern India. During her presentation, she is asked to elaborate on how the advent of print culture in India influenced various aspects of Indian society and culture. Highlight the points that Latika can use in describing the influence of print in India Explain.

Q.31 Name the most significant ferrous metal which can be called as the backbone of industrial development. Analyse upon its uses and availability.

OR

Ms. Sharma brings various rocks and ores to her class to teach her students about minerals. In her discussion with the children, they ask her if all the minerals occur in the same way or process. Help her identify any five points through which she can answer this question.

Q.32 'There is a huge difference between the state of international markets before and after the phenomenon of globalisation.' Justify the statement and give some examples to highlight the differences.

OR

Explain any five technological and institutional reforms in the Indian agriculture.

Q.33 'Decentralisation can be taken as means to minimise conflicts.' Analyse.

OR

'Courts have the power to interpret the constitution and the powers of different levels of government.' Justify in five points.

SECTION-E
(CASE-BASED QUESTIONS)

Q.34 Read the extract and answer the questions that follow:

Climate-smart agriculture (CSA) is an approach that helps guide actions to transform agri-food systems towards green and climate-resilient practices. CSA supports reaching internationally-agreed goals such as the Sustainable Development Goals and the Paris Agreement on climate change. CSA supports the Food and Agriculture Organisation Strategic Framework 2022-2031 based on the Four Betters: better production, better nutrition, a better environment and a better life for all, leaving no one behind.

Source (edited): Food and Agriculture Organisation

34.1 A CSA expert suggested increased production and consumption of millets in India. Justify their stance

34.2 What is the necessity to think of CSA in India?

34.3 Suggest two methods through which India can shift towards CSA.

Q.35 Read the extract and answer the questions that follow:

Given the abundance and renewability of water, it is difficult to imagine that we may suffer from water scarcity. The moment we speak of water shortages; we immediately associate it with regions having low rainfall or those that are drought prone. We instantaneously visualise the deserts of Rajasthan and women balancing many 'matkas' (earthen pots) used for collecting and storing water and travelling long distances to get water. True, the availability of water resources varies over space and time, mainly due to the variations in seasonal and annual precipitation, but water scarcity in most cases is caused by over-exploitation, excessive use and unequal access to water among different social groups.

35.1 1.How do women collect water in Rajasthan?

35.2 Why is water scarcity in most areas caused?

35.3 Do you think rainwater harvesting can help? Give reasons to justify your answer.

Q.36 Read the given extract and answer following questions that follow:

Power sharing arrangements can also be seen in the way political parties, pressure groups and movements control or influence those in power. In a democracy, the citizens must have freedom to choose among various contenders for power. In contemporary democracies, this takes the form of competition among

different parties. Such competition ensures that power does not remain in one hand. In the long run, power is shared among different political parties that represent different ideologies and social groups. Sometimes this kind of sharing can be direct, when two or more parties form an alliance to contest elections. If their alliance is elected, they form a coalition government and thus share power. In a democracy, we find interest groups such as those of traders, businessmen, industrialists, farmers and industrial workers. They also will have share in governmental power, either through participation in governmental committees or bringing influence on the decision- making process.

36.1 'Power sharing is an essential component of democracy.' Give one example to prove the statement.

36.2 How is alliance building an example of power sharing?

36.3 How Political parties, pressure groups and movements help in controlling or influencing those who are in power?

SECTION-F
(MAP SKILL-BASED QUESTION)

Q.37 Two places (I) and (II) have been marked on given outline map of India. Identify them and write their correct names on the lines drawn near them.

(a) The place where the peasants struggled against the Indigo Plantation system.

(b) The place where a session of Indian National Congress was held in December 1920.

Q.37 (a)

(ii) On the same outline map of India locate and label any three of the following with suitable symbols.

(a) A cotton textiles plant in Tamil Nadu

(b) A dam in Andhra Pradesh

(c) Kandla seaport

(d) Bengaluru Software Technology Park 3

(B) On the same outline map of India locate and label any three of the following with suitable symbols.

   (I)   A cotton textiles plant in Tamil Nadu

   (II) A dam in Andhra Pradesh

   (III) Kandla seaport

   (IV) Bengaluru Software Technology Park 3