

ENGLISH COMMUNICATIVE - Code No. 101
SAMPLE QUESTION PAPER
CLASS-X-(2025-26)

Time allowed: 3 Hrs.

Maximum Marks: 80

General Instructions

Read the following instructions carefully and follow them:

- i. This question paper has 12 questions. All questions are compulsory.
- ii. This question paper contains three sections:
Section A: Reading Skills,
Section B: Writing Skills
Section C: Grammar
Section D: Literature.
- iii. Attempt all questions based on specific instructions for each part. Write the correct question number and part thereof in your answer sheet.
- iv. Separate instructions are given with each question/part, wherever necessary.
- v. Adhere to the prescribed word limit while answering the questions.

SECTION A: READING SKILLS (22 marks)

1. Read the following passage carefully:

12

- 1 Remote, icy and mostly pristine, Greenland plays an outsized role in the daily weather experienced by billions of people and in the climate changes taking shape all over the planet. Think of Greenland as an open refrigerator door or thermostat for a warming world, and it's in a region that is warming four times faster than the rest of the globe, said New York University climate scientist David Holland.
- 2 Locked inside are valuable rare earth minerals needed for telecommunications, as well as uranium, billions of untapped barrels of oil and a vast supply of natural gas that used to be inaccessible but is becoming less so. Many of the same minerals are currently being supplied mostly by an Asian country, so other countries are interested. But more than the oil, gas or minerals, there's ice — a "ridiculous" amount, said climate scientist Eric Rignot. If that ice melts, it would reshape coastlines across the globe and potentially shift weather patterns in a dramatic manner. Greenland holds enough ice that if it all melts, the world's seas would rise by 24 feet.
- 3 Since 1992, Greenland has lost about 182 billion tons of ice each year, with losses hitting 489 billion tons a year in 2019. Greenland will be 'a key focus point' through the 21st century because of the effect its melting ice sheet will have on sea levels, said Mark Serreze, director of the National Snow and Ice Data Center. "It will likely become a bigger contributor in the future." That impact is perhaps unstoppable. Greenland is also changing colour as it melts from the white of ice, which reflects sunlight, heat and energy away from the planet, to the blue and green of the ocean and land, which absorb much more energy.

- 4 Greenland also serves as the engine and on/off switch for a key ocean current that influences Earth's climate in many ways, including hurricane and winter storm activity. It's called the Atlantic Meridional Overturning Circulation, or AMOC, and it's slowing down because more fresh water is being dumped into the ocean by melting ice in Greenland. A shutdown of the AMOC conveyor belt is a much-feared climate tipping point that could plunge Europe and parts of North America into prolonged freezes. "If this global current system were to slow substantially or even collapse altogether — as we know it has done in the past — normal temperature and precipitation patterns around the globe would change drastically," said climate scientist Jennifer Francis of the Woodwell Climate Research Center. "Agriculture would be derailed, ecosystems would crash, and 'normal' weather would be a thing of the past."
- 5 None of that takes into consideration the unique look of the ice-covered island that has some of the Earth's oldest rocks. "I see it as insanely beautiful. It's eye-watering to be there," said Holland, who has conducted research on the ice more than 30 times since 2007. "Pieces of ice the size of the Empire State Building are just crumbling off cliffs and crashing into the ocean. And also, the beautiful wildlife, all the seals and the killer whales. It's just breathtaking."

515 words / Adapted from The Hindu (Environment -January 08, 2025 post)

Answer the following questions, based on the passage above.

- I Why is Greenland referred to as 'an open refrigerator door or thermostat for a warming world'? (Paragraph 1) 1
- a) It controls global temperatures directly like a thermostat.
b) It is warming at the same rate as the rest of the globe.
c) It plays a critical role in influencing global weather and climate patterns.
d) It experiences warming but has limited influence on global weather patterns.
- II Complete the following with the correct option from those given in the brackets. 1
- In the line 'Greenland plays an outsized role...', the word 'outsized' indicates ____ (an unusually large impact or importance / a role that exceeds expectations or norms / a disproportionate influence compared to its size). (Paragraph 1)
- III Give two reasons why 'other countries' might be interested in Greenland's rare earth minerals and resources. Answer in 30-40 words. (Paragraph 2) 2
- IV What does Eric Rignot mean by 'ridiculous' in the phrase 'a ridiculous amount'? (Paragraph 2) 1
- Select the correct option to complete the answer.
- It means that the ice is ____.
- a) unnecessary and excessive
b) vast and overwhelming in quantity.
c) beyond what scientists can measure.
d) challenging to fully comprehend.

V Complete the following with the appropriate option.

1

The phrase 'Locked inside' brings up the imagery of a _____. (Paragraph 2)

- a) vault, emphasising security and value
- b) box, symbolising concealment and mystery.
- c) room, highlighting stored abundance.
- d) warehouse, showcasing accessibility and volume.

VI. What would be the most suitable title for paragraph 3?

1

- a) Greenland's Changing Climate and Ecosystem
- b) The Rising Sea Levels and Climate Impact of Greenland
- c) Greenland's Ice Melt: A Threat to Global Energy Balance
- d) Greenland's Melting Ice: A Growing Concern for the 21st Century

VII. Which phrase from paragraph 4 bears evidence to the fact that Greenland plays a critical role in controlling the AMOC?

1

VIII Fill in the blank by choosing the appropriate option from those given in the brackets.

2



Paragraph 4 includes a _____ (viewpoint / warning / speculation) by Jennifer Francis.

IX Why does Holland describe Greenland as 'eye-watering'? Answer in 30-40 words. (Paragraph 5)

2

2. Read the following.

10

 Feb Feb	 Sep Sep
FAIRS NAGAUER FAIR - 2025 The Nagaur Fair is the second biggest fair in India. Held every year between the months of January and February, it is popularly known as the Cattle Fair of Nagaur as this is where owners gather to trade animals. Approximately 70,000 bullocks, camels and horses are traded every year at this fair. The animals are lavishly decorated and even their owners dress up with colourful turbans. Besides cattle, sheep, horses and even spices are traded. Other attractions include the Mirchi Bazaar (largest red chilli market of India).	FESTIVALS ABHANERI FESTIVAL - 2025 'Abhaneri festival' is named after the village Abhaneri in the Dausa district which is around 90 km from Jaipur on the Agra road. This two-day festival has gained immense popularity amongst the tourists around the globe. It commences with various Rajasthani & local folk performances like Kachhi Ghor, Kalbeliya, Ghoomar, and Bhawai. The village of Abhaneri was originally named Abha Nagri, meaning 'city of brightness'. The place is popular for the Chand Baori-step well, one of the largest step wells built over a thousand years ago.

Source: www.tourism.rajasthan.gov.in / 190 words approx. / MCB theme : Travel & Tourism

Answer the following questions, based on your reading of the above information.

- I. Why is the tag 'A Hub for Livestock Trading' suitable for the Nagaur fair instead of 'Colourful Celebrations'? 2
- II. Complete the following with the correct option. 1
- The Nagaur Fair is held ____.
- a) quarterly
 - b) once in two years
 - c) annually
 - d) twice in a year
- III. State which of the following is True. 1
- a) Chand Baori is referred to as 'Abha Nagri'.
 - b) Chand Baori is a recent construction.
 - c) Chand Baori is an ancient stepwell.
- IV. What does the writer wish to convey by stating that the Abhaneri Festival 'has gained immense popularity among tourists'? 1
- V. What might be the most likely reason for the lavish decorations of animals at the Nagaur Fair? 1
- a) To celebrate the cultural heritage of Rajasthan.
 - b) To attract buyers and showcase the animals for trading.
 - c) To compete for the best-decorated animal.
 - d) To honour the animals as part of a religious ritual.
- VI. Fill in the blank by choosing the correct option from those given in the brackets. 1
- The Mirchi Bazaar is most likely an attraction at the Nagaur Fair because it provides a platform for ____ (tourists and organisers / farmers and traders) to display an essential spice.
- VII. If the Nagaur Fair highlights trading as its primary focus, what does the Abhaneri Festival most likely focus on? 1
- a) Promoting local agriculture
 - b) Encouraging community interaction
 - c) Celebrating historical heritage
 - d) Showcasing regional culture
- VIII. What might be the most likely reason why the Nagaur Fair spans across four days while the Abhaneri Festival ends in two days? 2

SECTION B
WRITING SKILLS (22 marks)

All the names and addresses used in the questions are fictitious. Resemblance, if any, is purely coincidental.

3. Write an application, in not more than 50 words, requesting permission to use the school transport to attend a tree plantation volunteering event. You are Lakshit Pandey, Class X-C, Vice-President, Ecology Club. **1x3=3**
4. Write a factual description of your favourite gadget in not more than 100 words, highlighting its key features and functionalities. **1x4=4**
5. Attempt **any one** of the two, (A) or (B), in 120 words **1x7=7**

- A.** The digital divide refers to the gap between those who have access to technology, such as the internet and digital devices, and those who do not. This disparity has significantly impacted education, especially for students from marginalised segments, by limiting their ability to access online resources and virtual classes.

As Sakshi Tripathi, 120 Kailash Nagar, Batanpur, write a letter to the editor of a national daily highlighting the issue, its effects on students and teachers, and suggesting practical measures to bridge this gap.

Use your own ideas along with those from MCB Unit 2: Education, to write this letter.

OR

- B.** India is home to a rich geological heritage, with unique landforms and rock formations like the Lonar Crater, Bhimbetka Rock Shelters etc. that hold immense scientific, educational, and cultural value. However, these sites often face neglect, vandalism, and lack of proper conservation efforts.

As Tanush of 63, Lajpat Nagar, Agra, write a letter to the editor of a national daily highlighting the importance of preserving India's geological heritage, the challenges it faces, and suggesting measures to protect and promote these natural treasures.

Use your own ideas along with those from MCB Unit 4 E: Environment – Geological Heritage, to write this letter.

6. Attempt **any one** of the two, (A) or (B), in 150 words **1x8=8**

- A** Imagine you are Vitthal K of class X. Write an article for your school magazine on the topic 'Achieving Holistic Wellness: The Key to a Happy Life,' emphasising the role of physical health, mental well-being, and positive lifestyle habits and natural remedies. Explain how these factors contribute to a balanced and fulfilling life, and suggest practical steps for incorporating them into daily routines.

You may use your own ideas along with the given cues and your reading of MCB Unit 1: Health and Wellness

holistic wellness - key aspects - simple habits can improve overall wellness - actionable ways needed to integrate wellness into everyday routines

OR

- B** You are Kadambari Rao, class X. Write an article on the topic ‘Space Travel: Accessible Tourism or a Risky Adventure?’ highlighting the potential benefits and challenges of making space travel available to the general public. Discuss whether space tourism should be pursued considering its environmental impact, safety concerns, and accessibility. Conclude with your opinion on whether it is a step forward or a risk not worth taking.
- You may use your own ideas along with the given cues and your reading of the MCB Unit 3: Science.

Potential Benefits - Challenges and Concerns: Environmental impact of frequent rocket launches (carbon emissions, pollution); accessibility opportunities creating inequalities; safety risks - Key Considerations: Should resources be focused on improving conditions on Earth instead?

SECTION C
GRAMMAR (10 marks)

- 7. Fill in the blanks (i) – (iii) with the appropriate option from those in the brackets. 3x1=3**

Therapeutic gardens are a public health measure and key to Singapore’s aim of (i) _____ (become/ becoming/ will becoming) one of the world’s top wellness destinations. In a tourism sense, wellness often (ii) _____ (had referred / refers / referring) merely to spa treatments but Singapore’s approach is more scientific. Singapore now (iii) _____ (have view/ has viewed / views) Therapeutic gardens as a forward-thinking tourism strategy.

- 8. In the following paragraph, one word has been omitted in each line. In your answer sheets, remember to write the missing word along with the word that comes before and after it, as shown below. The first one has been done as an example 4x1=4**

S No.	Text	Word Before	Omission	Word After
e.g.	The environment is most precious resource.	is	our	most
i	We reduce waste, conserve energy, and plant			
ii	more trees to combat pollution. This planet is only			
iii	home we have. Each action, big or small, make a			
iv	significant difference. We act now to safeguard			
	the environment and prevent it from further harm.			

9. Do as directed.

1 + 2 =3

- I Rearrange the following jumbled words/phrases in the given dialogue to create a meaningful sentence. 1

RAVI: Priya! Tell me about Orissa. I've always been curious about your state's culture and traditions.

PRIYA: (i) for our / in the eastern / is a beautiful / state / temple architecture/ rich heritage, part of India / and we are known / vibrant festivals / Orissa / and exquisite

- II. Report the conversation given below by filling in the blanks to complete the following paragraph. 2

Aanya: Hey, Rohan! Did you hear about the new discovery in space announcement yesterday?

Rohan: I heard about finding a planet with water vapour in its atmosphere!

Aanya asked Rohan (i) _____. Rohan exclaimed (ii) _____ in its atmosphere. Then, Aanya added that the new planet was in the 'habitable zone' with life-supporting conditions.

SECTION D: LITERATURE TEXTBOOK (26 MARKS)

10. Read the given extract and answer the questions briefly, for any two extracts, 2X4=8 of the three, given.

- A. "I thought you picked fruit for a living," I said.
"We do many things, sir," Nicola answered seriously. He glanced at us hopefully. "Often we show visitors through the town ... to Juliet's tomb ... and other places of interest."
Alright, "I smiled. "You take us along."
As we made the rounds, my interest was again provoked by their remarkable demeanour. They were childish enough, and in many ways quite artless. Jacopo was as lively as a squirrel. Nicola's smile was steady and engaging. Yet in both these boyish faces there was a seriousness which was far beyond their years.

(Two Gentlemen of Verona)

- I What might have been the most likely tone of the statement in 'I thought you picked fruit for a living...'? 1
- II Why did Nicola glance hopefully at the narrator? 1
- III What does the boys' willingness to engage in multiple tasks reveal about their attitude toward life? 1

- IV** What does the narrator's growing interest in the boys suggest about his perception of them? 1
- B.** "My name is Ozymandias, king of kings:
Look upon my works, ye Mighty, and despair!"
Nothing beside remains. Round the decay
Of that colossal wreck, boundless and bare
The lone and level sands stretch far away. (Ozymandias)
- I** How does the phrase 'king of kings' reflect Ozymandias' perception of himself? 1
- II** What does the line 'Look upon my works, ye Mighty, and despair!' imply about Ozymandias' intentions for future rulers? 1
- III** How does the imagery of 'boundless and bare' and 'lone and level sands' challenge Ozymandias' boast? 1
- IV** What message does the phrase "Nothing beside remains" convey about human ambition? 1
- C.** MRS. JORDAN: What bureau was that, Father?
ABEL: Why, my bureau the one I bought
MRS. JORDAN: (pointing to the bureau) Was it that one. Father?
ABEL: Ah, that's it. What's it doing here? Eh? (A pause. The clock on the mantelpiece strikes six. Everyone looks at it.)
Drat me if that isn't my clock too! What the devil's been going on in this house? (A slight pause.)
BEN: Well, I'll be hanged.
MRS. JORDAN: I'll tell you what's been going on in this house. Father. Nothing short of robbery.
MRS. SLATER: Be quiet, Elizabeth.
MRS. JORDAN: (rising) I'll not be quiet. Oh, I call it double-faced.
HENRY: Now now, Elizabeth.
MRS. JORDAN: And you, too. Are you such a poor creature that you must do every dirty thing she tells you?
MRS. SLATER: (rising) Remember where you are, Elizabeth.
HENRY: (rising) Come, come. No quarrelling. (The Dear Departed)
- I** What does the dialogue between Mrs. Jordan and Mrs. Slater reveal about their relationship? 1
- II** What is Mrs. Jordan implying about Henry when she says, "And you, too. Are you such a poor creature that you must do every dirty thing she tells you?" 1

- III How does Mrs. Jordan's accusation of 'robbery' impact the atmosphere of the scene in the extract? 1
- IV What does Abel's reaction to finding his possessions in the living room suggest about his awareness of his daughters' intentions? 1
- 11. Answer any five of the following six questions in about 30-40 words each. 5x2=10**
- I Support the view that the villagers were active participants in supporting Mrs. Packletide's ambition in the story 'Mrs. Packletide's Tiger'? 2
- II Explain briefly how the story 'Patol Babu' portrays the conflict between material rewards and self-satisfaction. 2
- III How does the mood shift throughout the story, 'The Letter'? 2
- IV How does the author use technology as a plot device in the story 'Virtually True'? 2
- V What role does the bog's audience play in the downfall of the nightingale in the poem 'The Frog and the Nightingale'? 2
- VI How does the structure of a Shakespearean sonnet enhance the impact of the poem, 'Not Marble, nor the Gilded Monuments'? 2
- 12. Answer any one of the following two questions in about 150 words. 1x8=8**
- I Discuss how the supernatural is portrayed in the drama excerpt 'Julius Caesar' and 'A Shady Plot' and examine how these portrayals serve to influence the characters' actions and the progression of the plot in each work?
- OR**
- II Both poems, 'The Rime of the Ancient Mariner' and 'Snake', depict the killing or harm of an innocent creature. Compare how the poets use these actions to reflect on human guilt and morality.

ENGLISH COMMUNICATIVE -Code No. 101
MARKING SCHEME
CLASS-X-(2025-26)

General Instructions: -

1. The Marking Scheme carries only suggested value points for the answers. These are in the nature of Guidelines only and do not constitute the complete answer. The students can have their own expression and if the expression is correct, then due marks should be awarded accordingly.
2. If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out with a note "Extra Question".
3. If more than one option is mentioned in the answer of multiple choice questions, then no marks to be awarded.

	SECTION A: READING SKILLS (22 MARKS)	
1.	Answer the following questions, based on the passage above.	12
I	c) It plays a critical role in influencing global weather and climate patterns.	1
II	an unusually large impact or importance	1
III	Because these resources are essential for industries like telecommunications and energy. Additionally, reliance on a single major supplier (the Asian country), makes diversifying resource acquisition crucial for economic and geopolitical stability.	2
IV	b) vast and overwhelming in quantity [Option a) is an obvious incorrect. Options c) and d) are plausible but incorrect: Option c) implies a limitation in scientific measurement, which isn't suggested in the passage. Option d) suggests difficulty in understanding the concept, whereas the passage emphasises the sheer magnitude of the ice, not the inability to comprehend it.]	1
V	a) vault, emphasising security and value [Option a) is correct because it conveys immense worth and inaccessibility. Option b) does not convey the sense of immense value and security. Option c) also lacks the connotation of security and exclusivity. Option d) only suggests easy accessibility and bulk storage, which contrasts with the idea of resources being difficult to obtain]	1
VI	d) Greenland's Melting Ice: A Growing Concern for the 21st Century [Option d) is the best choice because it comprehensively reflects the paragraph's focus on ice melt, rising sea levels, changing energy absorption, and the long-term global implications, making it the most fitting title. Option a) is too broad and doesn't specifically focus on the main issues discussed in the paragraph. While Option b) captures part of the paragraph's focus, it misses the critical detail about Greenland's changing colour and its effect on energy	1

	absorption, making it incomplete. Option c) focuses only on the energy absorption aspect, neglecting the significant discussion about rising sea levels and the long-term impact of ice melt]	
VII	engine and on/off switch	1
VIII	warning [The option 'speculative' is incorrect in this context because Jennifer Francis' statement in paragraph 4 is not a guess or assumption without evidence. The option 'viewpoint' is also incorrect as it typically reflects a personal opinion or belief, which may not necessarily be based on factual or scientific evidence. Jennifer's statement highlights a potential outcome which is not merely her viewpoint but a scientifically supported cautionary message. Thus, 'warning' is the correct choice because it highlights the cautionary and predictive nature of her statement.]	1
IX	Holland uses 'eye-watering' metaphorically to convey the overwhelming beauty and grandeur of Greenland. While it may not literally reduce him to tears, the phrase suggests the emotional intensity and awe-inspiring nature of the experience. It highlights how Greenland's landscapes and wildlife leave a profound visual impact that is hard to fully capture.	2
2.	Answer the following questions, based on given passage.	10
I	The tag 'A Hub for Livestock Trading' is suitable for the Nagaur Fair instead of 'Colourful Celebrations' because the fair primarily focuses on the large-scale trade of livestock, with over 70,000 animals being traded annually, highlighting its economic significance over its festive aspects. It reinforces its role as a center for commerce rather than just a celebration of culture.	2
II	c) annually	1
III	c) Chand Baori is an ancient stepwell.	1
IV	It highlights the increasing recognition and appeal of the Abhaneri Festival, showcasing its success in drawing attention and admiration from visitors worldwide.	1
V	b) To attract buyers and showcase the animals for trading.	1
VI	farmers and traders	1
VII	d) Showcasing regional culture	1
VIII	The Nagaur Fair spans four days because it involves extensive livestock trading, requiring ample time for transactions, negotiations, and showcasing animals. In contrast, the Abhaneri Festival lasts two days as it focuses on cultural performances and celebration, which can be effectively showcased within a shorter timeframe.	2
SECTION B- WRITING SKILLS (22 MARKS)		

3.	Format – 1 Content -1 Accuracy -1	3
	<p>Suggested Content points:</p> <ul style="list-style-type: none"> • Highlight that it is a tree plantation volunteering event and how it aligns with the school's values of environmental awareness and community service • Specify the date, time, and location of the event. • Politely request permission to use school transport for the event and benefit • Assure responsible usage and adherence to any guidelines provided. 	
4.	Content - 1 Organisation - 1 Accuracy -1	4
	<p>Content Points:</p> <ul style="list-style-type: none"> • Name and type of the gadget. • Brief reason for choosing it as your favourite. • Mention the standout specifications (e.g., sleek design, high performance, durability). • Highlight unique functionalities (e.g., voice commands, AI integration, touch screen) • Describe its primary purpose (e.g., communication, entertainment, productivity). • Additional features that make it versatile (e.g., multi-tasking, connectivity, battery life). • How it enhances your daily life. • Personal satisfaction or convenience provided by the gadget 	
5.	Format -1 Content -3 Organisation -2 Accuracy -1	1x7=7
A.	<p>Content Points:</p> <p>⇒ Impact on Students</p> <ul style="list-style-type: none"> • Students without digital access face difficulties in attending online classes and completing assignments. • Lack of exposure to digital tools limits learning opportunities and career readiness. • Emotional toll due to feelings of exclusion and falling behind peers. <p>⇒ Impact on Teachers</p> <ul style="list-style-type: none"> • Teachers struggle to reach students equitably, especially in rural or low-income areas. • Limited access to digital teaching aids and training hampers their ability to deliver quality education. <p>⇒ Suggested Measures</p> <ul style="list-style-type: none"> • Governments and NGOs should provide affordable devices and reliable internet connectivity. • Establish community learning centers with shared digital resources. • Encourage public-private partnerships to improve technology access in schools. 	
B.	<p>Content Points:</p> <p>⇒ Challenges</p> <ul style="list-style-type: none"> • Many geological sites face neglect and vandalism, leading to their gradual degradation. 	

	<ul style="list-style-type: none"> • Urbanisation, industrial activities, and unregulated tourism are major threats to these sites. • Lack of public awareness and insufficient government action aggravate the problem. <p>⇒ Suggestions for Preservation</p> <ul style="list-style-type: none"> • Geological sites should be declared protected areas and maintained with proper security measures. • Establish museums and information centers to promote the importance of these sites. • Introduce educational programmes in schools to foster appreciation for geological heritage. • Encourage responsible tourism and community involvement in conservation efforts. <p>⇒ Conclusion</p> <ul style="list-style-type: none"> • Urgent action is needed to protect these natural treasures and ensure they are preserved for future generations. 	
6.	Format - 1 Content - 3 Organisation – 3 Accuracy -1	8
A.	<p>Content points:</p> <p>⇒ Wellness is a holistic concept that includes physical, mental, and emotional health.</p> <p>⇒ A balanced lifestyle is essential for achieving complete wellness and leading a fulfilling life.</p> <p>⇒ Importance of Key Elements</p> <ul style="list-style-type: none"> • Physical Health - Regular exercise, nutritious food, and adequate hydration are vital for maintaining the body's strength and immunity. • Mental Wellness - Practices like mindfulness, meditation, and maintaining a positive outlook reduce stress and enhance emotional health. • Adequate Sleep - Quality sleep helps the body recover, boosts brain function, and strengthens immunity. • Laughter - Known as the best medicine, laughter reduces stress hormones, improves mood, and fosters better relationships. • Nature's Medicines - Herbal remedies and natural treatments like turmeric, tulsi, and ginger offer safe and effective healing. <p>⇒ Practical Suggestions</p> <ul style="list-style-type: none"> • Include daily exercise and a balanced diet in your routine. • Dedicate time for relaxation and activities that bring joy, like spending time with loved ones. • Sleep for 7-8 hours each night to recharge your body and mind. • Use natural remedies wisely, in consultation with experts, for common ailments. <p>⇒ Conclusion</p> <ul style="list-style-type: none"> • Complete wellness is not just about physical health but also mental and emotional well-being. • By incorporating small but meaningful changes in daily habits, everyone 	

	can lead a healthier, happier, and more balanced life.	
B.	<p>Content points:</p> <ul style="list-style-type: none"> ⇒ Space travel has moved from being a domain for astronauts to a potential avenue for public tourism. ⇒ The idea of space tourism fascinates many, but it comes with significant challenges and ethical concerns. ⇒ Potential Benefits <ul style="list-style-type: none"> • Unique Experiences - Experiencing zero gravity and viewing Earth from space can inspire awe and a deeper connection to the planet. • Economic Benefits - Creation of new jobs in the space industry, tourism, and associated sectors. • Advances in space technology could lead to innovations benefiting life on Earth. ⇒ Challenges and Concerns <ul style="list-style-type: none"> • Environmental Impact - Rocket launches produce significant carbon emissions, contributing to climate change. Pollution from frequent space travel may harm the atmosphere. • Accessibility Issues - High costs make space tourism available only to the wealthy, increasing societal inequalities. • Safety Risks - Space travel involves potential dangers like accidents, equipment failure, and radiation exposure. ⇒ Key Considerations <ul style="list-style-type: none"> • Should humanity invest resources in space tourism when many critical issues like poverty, education, and healthcare on Earth remain unresolved? • Can sustainable practices in space travel be developed to mitigate environmental and ethical concerns? ⇒ Conclusion <ul style="list-style-type: none"> • Space tourism offers exciting possibilities, but its risks and impacts cannot be ignored. • While advancements in space technology are commendable, the focus should first be on solving Earth's pressing issues. • Until space travel becomes safer, sustainable, and accessible to all, it may remain a risky luxury rather than a step forward for humanity. 	
	SECTION C-GRAMMAR (10 MARKS)	
7	Fill in the blanks with the appropriate option:	1x3=3
i	becoming	
ii	refers	
iii	views	
8	Identify the missing word in each line	1x4=4

No.	Word Before	Omission	Word After
e.g.	is	our	most
i	we	should	reduce
ii	is	the	only
iii	small	can	make
iv	we	must	act

9	Do as directed.	1X3=3
I		
i	Orissa is a beautiful state in the eastern part of India and we are known for our rich heritage, vibrant festivals and exquisite temple architecture.	1
II		
i	if/ whether he had heard about the new discovery announcement the previous day	1
ii	that he had heard about finding a planet with water vapour	1
10.	Read the given extracts and answer the questions briefly, for any two extracts, of the three, given	2x4=8
A		
I	The tone could be curious / inquisitive or surprised. The narrator might have been genuinely interested in learning more about the boys' work or surprised to discover that they engaged in multiple tasks beyond picking and selling fruit.	1
II	Nicola glanced hopefully at the narrator because he might have been expecting his interest in hiring him and Jacopo as guides. He likely saw it as an opportunity to earn more money, which would contribute to supporting their sister's treatment.	1
III	Displays their adaptability, and determination to overcome their difficult circumstance	1
IV	It suggests that he sees them as remarkable and intriguing, recognising a depth of character and maturity unusual for children of their age.	1
B		
I	It suggests Ozymandias' arrogance and belief in his unparalleled power and superiority over all rulers.	1
II	It implies that Ozymandias wanted future rulers to feel insignificant and awed by his achievements, believing they could never surpass his greatness.	1
III	The imagery emphasises the desolation and emptiness surrounding	1

	the ruins, contrasting sharply with Ozymandias' boastful claim, highlighting the futility of his pride.	
IV	It conveys the message that human ambition and achievements are ultimately transient, as time reduces even the greatest works to insignificance.	1
C		
I	The dialogue reveals a deep-seated rivalry / animosity between Mrs. Jordan and Mrs. Slater. Both women are quick to accuse and belittle each other, indicating underlying tensions and competition, especially regarding the inheritance.	1
II	Mrs. Jordan is implying that Henry is weak-willed and lacks independence, blindly following Mrs. Slater's manipulative and self-serving instructions. Her statement highlights her disdain for Henry's submissiveness and reveals her perception of him as a spineless accomplice in Mrs. Slater's schemes.	1
III	It heightens the tension and drama in the scene. It exposes the selfishness and greed of the characters, creating a chaotic and morally charged atmosphere.	1
IV	Abel's reaction, particularly his question about what the bureau and clock are doing downstairs, suggests that he quickly discerns his daughters' opportunistic behaviour and recognizes their greed and lack of respect.	1
11.	Answer any FIVE of the following SIX questions in 30-40 words each :	5x2=10
I	The villagers actively contribute to Mrs. Packletide's ambition by exaggerating her success in killing the tiger. They help create the illusion that she is a brave and heroic hunter by spreading the story and praising her. The villagers' involvement in this deception reinforces Mrs. Packletide's desire for social recognition and enhances her false sense of accomplishment.	2
II	Initially, Patol Babu is disappointed by the small payment for his acting role, feeling that it doesn't compensate for his years of experience. However, when he immerses himself in his craft, he finds personal satisfaction in the perfect execution of his lines, despite the meagre financial reward. The story portrays how true contentment often arises from self-respect and the joy of doing something well, rather than external recognition or financial gain.	2
III	The mood in the story shifts from melancholy to reflective, and ultimately, to a bittersweet sense of empathy and regret. It begins with a sombre tone as Ali, filled with loneliness and faith, endures the biting cold and mockery at the post office. The mood turns reflective when Ali's story unfolds, and the postmaster, experiencing similar anxiety, gains empathy. The ending blends sadness with realisation, emphasising the human connection through shared suffering.	2

IV	The author uses the concept of advanced virtual reality games to blur the lines between the real and virtual worlds. By integrating Sebastian's consciousness into the psycho-drive games, the author explores the potential and unintended consequences of futuristic technology, creating suspense and an engaging narrative.	2
V	The audience's initial adulation creates a dependency in the nightingale for constant applause, fuelling her need to perform tirelessly to maintain their approval. This relentless pursuit of admiration pushes her to overexert herself under the frog's guidance. Later, their loss of interest in her uninspired performances deepens her despair, as she equates her worth with their appreciation.	2
VI	The Shakespearean sonnet form divided into three quatrains and a concluding rhymed couplet, allows Shakespeare to build his argument progressively. In the quatrains, he contrasts the impermanence of physical monuments with the enduring nature of poetry, while the final couplet delivers a powerful conclusion, highlighting the immortality of the loved one, through verse. The consistent metre and the rhyme scheme provide a rhythm that reinforces the theme of permanence amidst the passage of time.	2
12.	Answer ANY ONE of the following two questions, in about 150 words	1x8=8
A. Content points: <ul style="list-style-type: none"> ⇒ Supernatural in 'Julius Caesar': <ul style="list-style-type: none"> • Portents and omens: Calpurnia's dream, the soothsayer's warning ('Beware the Ides of March'), dreams of unnatural phenomena like graves opening etc. • Role: The supernatural heightens tension, foreshadows tragedy, and adds a layer of inevitability to Caesar's fate. It reflects the characters' inner turmoil and the unrest of Rome. ⇒ Supernatural in 'A Shady Plot': <ul style="list-style-type: none"> • The humorous take on the supernatural - Ghosts appear as part of a comical narrative, with Helen (the ghost) providing a light-hearted take on the afterlife and her 'Writer's Inspiration Bureau.' • Role: Unlike in 'Julius Caesar', the supernatural in 'A Shady Plot' serves as a satirical device to critique the writing process and human follies rather than a serious narrative. ⇒ Comparison: <ul style="list-style-type: none"> • In 'Julius Caesar', the supernatural reflects the gravity of fate, politics, and human ambition. In contrast, in 'A Shady Plot,' it is a tool for humour and irony. • Both, however, influence the actions of the characters (Caesar ignoring the omens, John in 'A Shady Plot' trying to appease Helen). 		

B.

Content Points:

⇒ Introduction

- Both poems acts disrupt nature and lead to guilt and self-realisation.
- The Mariner's act symbolises arrogance, while the narrator's in 'Snake' reflects conditioning by the society.

⇒ The Mariner's Act and Guilt

- The Mariner impulsively kills the Albatross, a symbol of goodwill and nature's harmony.
- His action brings a curse, leading to suffering of his crew.
- Guilt is externalised as he is condemned share his tale as penance.
- Realisation comes through understanding the sanctity of all life, leading to redemption.

⇒ The Narrator's Act and Guilt in 'Snake'

- The narrator admires the snake's majesty but is driven by conditioning to harm it.
- Unlike the Mariner, his regret is immediate and internal, reflecting personal moral failure.
- He envies the snake's dignity and feels he has betrayed his own values by acting out of fear and external expectation.

⇒ Conclusion

- Both poems highlight the moral and emotional consequences of disrupting the natural order.
- They emphasise guilt as a transformative force, leading to self-awareness and moral growth.
- The poems point to humanity's flawed relationship with nature and the need to respect all living beings.

हिन्दी (पाठ्यक्रम-अ) कोड (002)
प्रतिदर्श प्रश्नपत्र*
कक्षा-दसवीं (2025-26)

निर्धारित समय : 3 घंटे

अधिकतम अंक : 80

सामान्य निर्देश :

निम्नलिखित निर्देशों को बहुत सावधानी से पढ़िए और उनका सख्ती से 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 हैं ।
- (iii) प्रश्नपत्र में आंतरिक विकल्प दिए गए हैं ।
- (iv) प्रश्नों के उत्तर दिए गए निर्देशों का पालन करते हुए लिखिए ।

	खंड - क (अपठित बोध)	अंक 14
1	<p>निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर उस पर आधारित पूछे गए प्रश्नों के उत्तर लिखिए :</p> <p>भारतीय संस्कृति, जीवनशैली और खान-पान में मोटे अनाजों (मिलेट्स) का विशेष स्थान रहा है । ये विशिष्ट अनाज हमारे स्वास्थ्य के लिए लाभदायक होने के साथ-साथ पर्यावरण के लिए भी अच्छे होते हैं क्योंकि कम पानी और संसाधन के बीच ये विकसित हो जाते हैं । यह हमारे लिए गौरव की बात है कि भारत सरकार के सुझाव पर संयुक्त राष्ट्र ने वर्ष 2023 को अंतरराष्ट्रीय मोटा अनाज वर्ष के रूप में घोषित किया । जिसका उद्देश्य मोटे अनाजों को लेकर जागरूकता फैलाना और इनके उत्पादन व सेवन को बढ़ावा देना है ।</p> <p>आमजन के बीच मोटे अनाजों का सेवन पिछली कई शताब्दियों से प्रचलित है, परन्तु इसके पोषकीय और औषधीय गुणों की जानकारी हाल ही में हुए जैव-रासायनिक अनुसंधानों और चिकित्सा संबंधी अध्ययनों से सामने आई है । आधुनिक जीवनशैली से उत्पन्न होने वाले रोगों के संदर्भ में मोटे अनाजों के अनेक स्वास्थ्य लाभों को दुनिया ने जाना-पहचाना और सराहा है । मोटे अनाजों में गेहूँ और धान की अपेक्षा प्रोटीन और संतुलित अमीनो अम्ल अधिक पाया जाता है । इस तरह से ये मोटे अनाज बाकी अनाजों से पोषण के मामले में श्रेष्ठ होते हैं । इसके अलावा, मोटे अनाज आहार संबंधी रेशों, गुणवत्तापूर्ण वसा और महत्वपूर्ण खनिज जैसे- कैल्शियम, पोटैशियम, मैग्नीशियम, आयरन, जिंक तथा बी-कॉम्प्लेक्स विटामिनों के समृद्ध स्रोत हैं । मोटे अनाजों में पोषण और स्वास्थ्य से जुड़े इतने फायदों के बावजूद वर्तमान समय में मानव आबादी इनका सेवन नहीं करती या बहुत कम लोग इसे अपने खाने की थाली में जगह देते हैं । यह एक विडंबना है । मोटे अनाजों के सेवन में इस गिरावट से भारत में पोषण स्थिति में भारी कमी आई है । भारत में कुपोषण की समस्या खेदजनक है ।</p> <p style="text-align: right;">स्रोत - विज्ञान प्रगति (मासिक पत्रिका)</p>	7
(क)	<p>उपर्युक्त गद्यांश किस विषयवस्तु पर आधारित है?</p> <p>(i) कुपोषण की समस्या पर</p> <p>(ii) मोटे अनाज के महत्व पर</p> <p>(iii) संतुलित आहार के महत्व पर</p> <p>(iv) स्वास्थ्य संबंधी समस्याओं पर</p>	1

(ख)	निम्नलिखित कथन और कारण पर विचार करते हुए उपयुक्त विकल्प का चयन कर लिखिए : कथन : मोटे अनाज बाकी अनाजों से पोषण के मामले में श्रेष्ठ होते हैं । कारण : मोटे अनाजों में अनेक पोषकीय और औषधीय खूबियाँ होती हैं । विकल्प – (i) कथन गलत है, किंतु कारण सही है । (ii) कथन और कारण दोनों गलत हैं । (iii) कथन सही है और कारण कथन की सही व्याख्या है । (iv) कथन सही है किंतु कारण कथन की सही व्याख्या नहीं है ।	1
(ग)	अंतरराष्ट्रीय मोटा अनाज वर्ष का उद्देश्य है – उचित विकल्प का चयन करें – (I) मोटे अनाज के उत्पादन को बढ़ावा देना । (II) मोटे अनाज के प्रति जागरूकता फैलाना । (III) मोटे अनाज को मुख्य फ़सल घोषित करना । (IV) मोटे अनाज की प्रतिष्ठा को क्षति पहुँचाना । विकल्प – (i) कथन (I) और (II) सही हैं । (ii) केवल कथन (III) सही है । (iii) कथन (I) और (IV) सही हैं । (iv) कथन (I), (II) और (IV) सही हैं ।	1
(घ)	आज मोटे अनाज अपने किन गुणों के कारण लोकप्रिय हो रहे हैं ?	2
(ङ)	कुपोषण की समस्या के समाधान में मोटे अनाजों की क्या भूमिका हो सकती है ?	2
2	निम्नलिखित काव्यांश को ध्यानपूर्वक पढ़कर उस पर आधारित पूछे गए प्रश्नों के उत्तर लिखिए : गुलाब का फूल है हमारा पढ़ा-लिखा मैंने उसे काफी उलट-पुलट कर देखा है मुझे तो वह ऐसा ही दिखा सबसे बड़ा सबूत उसके गुलाब होने का यह है कि वह गाँव में जाकर बसने के लिए तैयार नहीं है गाँव में उसकी प्रदर्शनी कौन कराएगा वहाँ वह अपनी शोभा की प्रशंसा किससे कराएगा वह फूलने के बाद किसी फसल में थोड़े ही बदल जाता है	7

	<p>मूरख किसान को फूलने के बाद फसल देने वाला ही तो भाता है</p> <p>गाँव में इसलिए ठीक है अलसी और सरसों और तिली के फूल जा नहीं सकते वहाँ कदापि गुलाब और लिली के फूल</p> <p>बुरा नहीं मानना चाहिए इस गुलाब – वृत्ति का गाँव वालों को क्योंकि वहाँ रहना चाहिए सिर्फ ऐसे हाथ-पाँव वालों को</p> <p>जो बो सकते हैं और काट सकते हैं कुएँ खोद सकते हैं खाई पाट सकते हैं और फिर भी चुपचाप समाजवाद पर भाषण सुनकर वोट दे सकते हैं गुलाब के फूल को</p> <p style="text-align: right;">– भवानी प्रसाद मिश्र</p>	
(क)	<p>प्रस्तुत कविता में किस भाव की प्रधानता है ?</p> <p>(i) हास्य (ii) प्राकृतिक सौंदर्य (iii) व्यंग्य (iv) आक्रोश</p>	1
(ख)	<p>‘गुलाब’ किसका प्रतीक है ?</p> <p>(i) शहर के पढ़े-लिखे नौजवानों का । (ii) शहर के वातावरण का । (iii) शहर की ज़िंदगी का । (iv) शहर की सुविधाओं का ।</p>	1
(ग)	<p>निम्नलिखित कथन और कारण पर विचार करते हुए उपयुक्त विकल्प का चयन कर लिखिए :</p> <p>कथन : बुरा नहीं मानना चाहिए, इस गुलाब-वृत्ति का । कारण : वह बचपन से शहर में ही पला-बड़ा है । विकल्प :</p> <p>(i) कथन गलत है, किंतु कारण सही है । (ii) कथन और कारण दोनों ही गलत हैं । (iii) कथन सही है और कारण कथन की सही व्याख्या है । (iv) कथन सही है किंतु कारण कथन की सही व्याख्या नहीं है ।</p>	1
(घ)	<p>गुलाब गाँव में जाकर बसने के लिए क्यों तैयार नहीं है ?</p>	2

(ड)	कविता के आधार पर लिखिए कि किसान को किस तरह के फूल भाते हैं और क्यों ?	2
	खंड - ख (व्यावहारिक व्याकरण)	16
3	निर्देशानुसार 'रचना के आधार पर वाक्य भेद' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिए :	4×1=4
(क)	नवाब साहब ने तौलिया झाड़ा और सामने बिछा लिया । (सरल वाक्य में बदलिए)	
(ख)	हालदार साहब को उधर से गुज़रते समय मूर्ति में कुछ अंतर दिखाई दिया । (मिश्र वाक्य में बदलिए)	
(ग)	मन्नू के एक इशारे पर लड़कियाँ कक्षा से बाहर निकलकर नारे लगाने लगीं । (संयुक्त वाक्य में बदलिए)	
(घ)	कातिक आया नहीं कि बालगोबिन भगत की प्रभातियाँ शुरू हुई । (रचना की दृष्टि से वाक्य का भेद लिखिए)	
(ङ)	सबसे बड़ी बात है कि काशी के पास उस्ताद बिस्मिल्ला खाँ जैसा नायाब हीरा रहा है । (रेखांकित उपवाक्य का भेद लिखिए)	
4	निर्देशानुसार 'वाच्य' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिए :	4×1=4
(क)	पतोहू ने भगत को दुनियादारी से निवृत्त कर दिया था । (कर्मवाच्य में बदलिए)	
(ख)	नवाब साहब द्वारा खीरे पर मसाला छिड़का गया। (कर्तृवाच्य में बदलिए)	
(ग)	आओ, पेड़ की छाया में बैठे । (भाववाच्य में बदलिए)	
(घ)	मुझसे यह काम नहीं हो सकता । (कर्तृवाच्य में बदलिए)	
(ङ)	उद्धव द्वारा ज्ञान का उपदेश दिया गया। (वाच्य पहचानकर भेद बताइए)	
5	निर्देशानुसार 'पद परिचय' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के रेखांकित पदों का पद-परिचय लिखिए :	4×1=4
(क)	शीला अग्रवाल को कॉलेज वालों ने नोटिस थमा दिया ।	
(ख)	खीरे की पनियाती फाँकेँ बहुत स्वादिष्ट थीं।	
(ग)	शुक्ल पक्ष में चाँद निरंतर बढ़ता है।	
(घ)	उनकी अँगुलियाँ खँजड़ी पर लगातार चल रहीं थीं ।	
(ङ)	शाबाश ! तुमने कितना अच्छा कार्य किया।	
6	निर्देशानुसार 'अलंकार' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों की रेखांकित काव्य पंक्तियों में अलंकार पहचान कर लिखिए :	4×1=4
(क)	प्रीति-नदी में पाउँ न बोरयौ ।	
(ख)	कोटि कुलिस सम बचनु तुम्हारा । ब्यर्थ धरहु धनु बान कुठारा ।।	
(ग)	आगे नदिया पड़ी अपार, घोड़ा कैसे उतरे पार । राणा ने सोचा इस पार, तब तक चेतक था उस पार ।।	
(घ)	सिमटा हुआ संकोच है हवा की थिरकन का ।	
(ङ)	सुनत जोग लागत है ऐसौ, ज्यों करुई ककरी ।	
	खंड - ग (पाठ्य पुस्तक एवं पूरक पाठ्य पुस्तक)	30
7	निम्नलिखित पठित गद्यांश पर आधारित बहुविकल्पीय प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए :	5×1=5

	वही पुराना स्वर, वही पुरानी तल्लीनता। घर में पतोहू रो रही है जिसे गाँव की स्त्रियाँ चुप कराने की कोशिश कर रही हैं। किंतु, बालगोबिन भगत गाए जा रहे हैं! हाँ, गाते-गाते कभी-कभी पतोहू के नज़दीक भी जाते और रोने के बदले उत्सव मनाने को कहते। आत्मा परमात्मा के पास चली गई, विरहिनी अपने प्रेमी से जा मिली, भला इससे बढ़कर आनंद की कौन बात? मैं कभी-कभी सोचता, यह पागल तो नहीं हो गए, किंतु नहीं, वह जो कुछ कह रहे थे उसमें उनका विश्वास बोल रहा था-वह चरम विश्वास, जो हमेशा ही मृत्यु पर विजयी होता आया है। बेटे के क्रिया-कर्म में तूल नहीं किया; पतोहू से ही आग दिलाई उसकी। किंतु ज्यों ही श्राद्ध की अवधि पूरी हो गई, पतोहू के भाई को बुलाकर उसके साथ कर दिया, यह आदेश देते हुए कि इसकी दूसरी शादी कर देना।	
(क)	बालगोबिन भगत जी द्वारा किया गया कौन-सा कार्य सामाजिक परंपरा के विरुद्ध था? (I) पतोहू से बेटे की चिता को आग दिलाना। (II) पतोहू को उसके भाई के साथ मायके भेजना। (III) बेटे का श्राद्ध विधि-विधान से करना। (IV) बेटे की मृत्यु का उत्सव मनाना। विकल्प – (i) कथन (I) और (II) सही हैं। (ii) केवल कथन (III) सही है। (iii) कथन (I) और (IV) सही हैं। (iv) कथन (II) और (III) सही हैं।	
(ख)	‘विरहिनी अपने प्रेमी से जा मिली’ – इस कथन में बालगोबिन भगत के अनुसार विरहिनी कौन है? (i) परमात्मा (ii) आत्मा (iii) काया (iv) मृत्यु	
(ग)	निम्नलिखित कथन और कारण पर विचार करते हुए उपयुक्त विकल्प का चयन कर लिखिए : कथन : बालगोबिन भगत ने अपने पुत्र को मुखाग्नि देने का कार्य अपनी पुत्रवधु से करवाया। कारण : बालगोबिन भगत रूढ़ि विरोधी और नारी सम्मान के पक्षधर थे। विकल्प : (i) कथन ग़लत है, किंतु कारण सही है। (ii) कथन और कारण दोनों ही ग़लत हैं। (iii) कथन सही है और कारण कथन की सही व्याख्या है। (iv) कथन सही है किंतु कारण कथन की सही व्याख्या नहीं है।	
(घ)	लेखक को यह संदेह है कि बालगोबिन भगत कहीं पागल तो नहीं हो गए क्योंकि (I) वे पतोहू को उसके भाई के साथ मायके भेज रहे थे। (II) वे रोने के बदले उत्सव मनाने को कह रहे थे। (III) वे पुत्र की मृत्यु के बाद गाए जा रहे थे। (IV) वे पतोहू को चुप कराने की कोशिश कर रहे थे। विकल्प – (i) कथन (I) और (II) सही हैं। (ii) केवल कथन (III) सही है। (iii) कथन (I) और (IV) सही हैं।	

	(iv) कथन (II) और (III) सही हैं।	
(ड)	बेटे की मृत्यु के बाद बालगोबिन भगत अपनी बहू से क्या अपेक्षा रखते थे ? (i) वह उनकी आजीवन सेवा करे। (ii) वह विधवा का जीवन व्यतीत करे। (iii) वह कबीर के गीत गाया करे। (iv) वह पुनर्विवाह कर ले।	
8	निर्धारित गद्य पाठों के आधार पर निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में लिखिए :	3×2=6
(क)	‘नेताजी का चश्मा’ कहानी के आधार पर हालदार साहब के व्यक्तित्व का परिचय लिखिए।	
(ख)	लेखिका मन्नू भंडारी ने अपनी माँ की तुलना धरती से क्यों की है ? ‘एक कहानी यह भी’ पाठ के आधार पर स्पष्ट कीजिए।	
(ग)	‘मेरे मालिक एक सुर बक्श दे। सुर में वह तासीर पैदा कर कि आँखों से सच्चे मोती की तरह अनगढ़ आँसू निकल आएँ।’ ‘नौबतखाने में इबादत’ पाठ के आधार पर बिस्मिल्ला खाँ के इस कथन को स्पष्ट कीजिए।	
(घ)	लेखक संस्कृति-असंस्कृति और सभ्यता-असभ्यता के भ्रमजाल में फँसे मनुष्यों से क्या प्रश्न करता है ?	
9	निम्नलिखित पठित काव्यांश पर आधारित बहुविकल्पीय प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए : तारसप्तक में जब बैठने लगता है उसका गला प्रेरणा साथ छोड़ती हुई उत्साह अस्त होता हुआ आवाज़ से राख जैसा कुछ गिरता हुआ तभी मुख्य गायक को ढाँढ़स बँधाता कहीं से चला आता है संगतकार का स्वर कभी-कभी वह यों ही दे देता है उसका साथ यह बताने के लिए कि वह अकेला नहीं है और यह कि फिर से गाया जा सकता है गाया जा चुका राग और उसकी आवाज़ में जो एक हिचक साफ़ सुनाई देती है या अपने स्वर को ऊँचा न उठाने की जो कोशिश है उसे विफलता नहीं उसकी मनुष्यता समझा जाना चाहिए।	5×1=5
(क)	‘तारसप्तक में जब बैठने लगता है उसका गला’ इस पंक्ति में ‘उसका’ शब्द किसके लिए प्रयोग किया गया है ? (i) संगतकार के लिए। (ii) संगीतकार के लिए। (iii) तबला वादक के लिए। (iv) मुख्य गायक के लिए।	
(ख)	निम्नलिखित काव्य पंक्तियों में से किस पंक्ति से मुख्य गायक के उत्साह के क्षीण होने का पता चलता है ? सही विकल्प का चयन कीजिए – (I) आवाज़ से राख जैसा कुछ गिरता हुआ।	

	<p>(II) प्रेरणा साथ छोड़ती हुई उत्साह अस्त होता हुआ । (III) कहीं से चला आता है संगतकार का स्वर । (IV) उसकी आवाज़ में जो एक हिचक साफ़ सुनाई देती है । विकल्प – (i) कथन (I) और (II) सही हैं । (ii) केवल कथन (III) सही है । (iii) कथन (I) और (IV) सही हैं । (iv) कथन (II) और (III) सही हैं ।</p>	
(ग)	<p>निम्नलिखित कथन और कारण पर विचार करते हुए उपयुक्त विकल्प का चयन कर लिखिए : कथन : संगतकार की आवाज़ में एक हिचक साफ़ सुनाई देती है और वह अपनी आवाज़ को ऊँचा नहीं उठने देने की कोशिश करता है । कारण : दूसरों को सफल बनाने के लिए त्याग करना मनुष्यता होती है । संगतकार का त्याग उसकी मनुष्यता का परिचायक है । विकल्प : (i) कथन ग़लत है, किंतु कारण सही है । (ii) कथन और कारण दोनों ही ग़लत हैं । (iii) कथन सही है और कारण कथन की सही व्याख्या है । (iv) कथन सही है किंतु कारण कथन की सही व्याख्या नहीं है ।</p>	
(घ)	<p>संगतकार किस प्रकार मुख्य गायक को अहसास दिलाता है कि वह अकेला नहीं है ? (i) मुख्य गायक के समान भारी स्वर में गाकर । (ii) मुख्य गायक को प्रेरित करके । (iii) मुख्य गायक से ऊँचे स्वर में गाकर । (iv) मुख्य गायक के टूटते स्वर में अपना स्वर मिलाकर ।</p>	
(ङ)	<p>संगतकार के स्वर में हिचक सुनाई देने का क्या कारण है ? (i) संगतकार में आत्मविश्वास का अभाव है । (ii) संगतकार मुख्य गायक का मान बनाए रखना चाहता है । (iii) संगतकार को गायन में अभी प्रवीणता नहीं आई है । (iv) संगतकार में भय और हीनता का भाव है ।</p>	
10	निर्धारित कविताओं के आधार पर निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में लिखिए :	3×2=6
(क)	गोपियों को उद्धव से क्यों कहना पड़ा – ‘हरि हैं राजनीति पढ़ि आए’ । ‘सूरदास के पद’ के आधार पर उत्तर लिखिए ।	
(ख)	‘सो बिलगाउ बिहाई समाजा । न त मारे जैहहि सब राजा’ – परशुराम जी के मुँह से ऐसा सुनकर लक्ष्मण की क्या प्रतिक्रिया रही ?	
(ग)	‘उत्साह’ और ‘अट नहीं रही है’ कविताओं के आधार पर सूर्यकांत त्रिपाठी ‘निराला’ जी के प्रकृति चित्रण का वर्णन अपने शब्दों में कीजिए।	
(घ)	‘आत्मकथ’ कविता के माध्यम से कवि श्री ‘जयशंकर प्रसाद’ जी के व्यक्तित्व की जो झलक मिलती है, वह उनकी ईमानदारी और साहस का प्रमाण है, स्पष्ट कीजिए।	
11	पूरक पाठ्य पुस्तक के निर्धारित पाठों पर आधारित निम्नलिखित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 50-60 शब्दों में लिखिए :	2×4=8

(क)	'माता का अँचल' पाठ में ग्राम्य संस्कृति के जिस रूप का चित्रण है- वह आधुनिक युग में पर्याप्त अंशों में परिवर्तित हो चुका है। परिवर्तित रूप से कुछ उदाहरण देते हुए इस कथन के समर्थन में अपने विचार लिखिए।	
(ख)	'यंत्रों की दुनिया ने मनुष्य को यांत्रिक व भाव शून्य बनाने का कार्य किया है, जबकि यात्राएँ मनुष्य को भाव शून्य होने से रोकती हैं।' 'साना-साना हाथ जोड़ि' पाठ के आधार पर आप अपने विचार लिखिए।	
(ग)	'मैं क्यों लिखता हूँ' पाठ के आधार पर बताइए कि भीतरी विवशता क्या होती है ? लेखक श्री अज्ञेय जी ने इसे स्पष्ट करने के लिए किसकी चर्चा की है ?	
	खंड - घ (रचनात्मक लेखन)	20
12	निम्नलिखित तीन विषयों में से किसी एक विषय पर संकेत बिन्दुओं के आधार पर लगभग 120 शब्दों में एक अनुच्छेद लिखिए : (क) ऑनलाइन गेमिंग का बढ़ता जाल <ul style="list-style-type: none"> ऑनलाइन गेमिंग क्या है ? बच्चों और किशोरों पर बढ़ती पकड़ ऑनलाइन गेमिंग के दुष्परिणाम (ख) स्वस्थ जीवन शैली <ul style="list-style-type: none"> स्वस्थ जीवन शैली की आवश्यकता स्वस्थ आदतें जिनका पालन किया जाना चाहिए स्वस्थ जीवनशैली के लाभ (ग) हाल ही में देखी फ़िल्म / नाटक की समीक्षा <ul style="list-style-type: none"> कहानी, पात्र, संवाद, अभिनय कैसा लगा ? क्या वास्तविक जीवन के निकट थी ? क्या प्रेरणा मिली ? 	1×6=6
13	(क) आप आनंदी/आनंद हैं। अपने क्षेत्र में बिजली की कटौती से उत्पन्न समस्याओं का उल्लेख करते हुए किसी लोकप्रिय दैनिक समाचार-पत्र के संपादक को लगभग 100 शब्दों में पत्र लिखिए। अथवा (ख) आप आनंदी/आनंद हैं। छोटे-मोटे रोगों के लिए आपकी दादी माँ द्वारा बताए गए घरेलू नुस्खों को संकलित करके आपने एक पुस्तक बनाई है। जिसका नाम आपने 'दादी माँ के घरेलू नुस्खे' रखा है। पुस्तक के प्रकाशन के अवसर पर अपनी दादी माँ को आमंत्रित करते हुए उन्हें लगभग 100 शब्दों में पत्र लिखिए।	1×5=5
14	(क) आप प्रेरणा/प्रेरक हैं। आपने हिन्दी विषय में एम.ए. किया है साथ ही आपके पास बी.एड. की डिग्री भी है। आपके शहर के एक प्रतिष्ठित विद्यालय में हिन्दी विषय के स्नातक शिक्षकों के कुछ पद रिक्त हैं। आपको उस पद के लिए आवेदन करना है। इसके लिए लगभग 80 शब्दों में अपना एक स्ववृत्त लेख तैयार कीजिए। अथवा (ख) आप प्रेरणा/प्रेरक हैं। आपके क्षेत्र में सफ़ाई व्यवस्था चरमराई हुई है। सफ़ाई कर्मचारी अक्सर अनुपस्थित रहते हैं। नगर निगम अधिकारी को इससे अवगत कराते हुए लगभग 80 शब्दों में ई-मेल कीजिए।	1×5=5
15	(क) सौर ऊर्जा के प्रयोग को प्रोत्साहन देने के लिए एक आकर्षक विज्ञापन लगभग 40 शब्दों में विद्युत मंत्रालय की ओर से तैयार कीजिए।	1×4=4

	अथवा (ख) आपके हिन्दी शिक्षक/शिक्षिका का नया 'काव्य संग्रह' प्रकाशित हुआ है। उन्हें इस अवसर पर बधाई देते हुए लगभग 40 शब्दों में एक बधाई संदेश लिखिए।	
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अंक योजना
प्रतिदर्श प्रश्नपत्र (2025-26)
हिन्दी (पाठ्यक्रम-अ)
कोड (002)
कक्षा-दसवीं

निर्धारित समय: 3 घंटे

अधिकतम अंक : 80

सामान्य निर्देश :

1. अंक योजना का उद्देश्य मूल्यांकन को अधिकाधिक वस्तुनिष्ठ बनाना है ।
2. अंक योजना में दिए गए वर्णनात्मक प्रश्नों के उत्तर बिंदु अंतिम नहीं हैं ।
ये सुझावात्मक एवं सांकेतिक हैं ।
3. यदि परीक्षार्थी इन उत्तर बिंदुओं से भिन्न, किंतु उपयुक्त उत्तर दें तो उसे उपयुक्त अंक दिए जाएँ ।
4. एक ही प्रकार की अशुद्धि पर बार-बार अंक न काटा जाए ।
5. मूल्यांकन में संपूर्ण अंक पैमाने - 0 से 80 का प्रयोग अभीष्ट है

प्रश्न	उत्तर संकेत / मूल्य बिंदु	अंक और अंक विभाजन
	खंड - क (अपठित बोध)	14
1	निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर उस पर आधारित पूछे गए प्रश्नों के उत्तर लिखिए :	7
(क)	(ii) मोटे अनाज के महत्त्व पर ।	1
(ख)	(iii) कथन सही है और कारण कथन की सही व्याख्या है ।	1
(ग)	(i) कथन (I) और (II) सही हैं ।	1
(घ)	आज मोटे अनाजों की लोकप्रियता के कारण : <ul style="list-style-type: none"> • जैव-रासायनिक अनुसंधानों और चिकित्सा संबंधी अध्ययनों से मोटे अनाजों के अनेक पोषकीय और औषधीय गुणों से लोग परिचित हुए हैं । • ये हमारे स्वास्थ्य के लिए लाभदायक होने के साथ-साथ पर्यावरण के लिए भी अच्छे होते हैं । • अंतरराष्ट्रीय मोटा अनाज वर्ष मनाने से इनके सेवन को बढ़ावा मिला । (केवल दो बिंदु अपेक्षित)	2
(ङ)	कुपोषण की समस्या के समाधान में मोटे अनाजों की अहम् भूमिका है - <ul style="list-style-type: none"> • मोटे अनाज आहार संबंधी रेशों, गुणवत्तापूर्ण वसा और महत्वपूर्ण खनिज जैसे- कैल्शियम, पोटैशियम, मैग्नीशियम, आयरन, जिंक तथा बी-कॉम्प्लेक्स विटामिनों के समृद्ध स्रोत हैं । • मोटे अनाज बाकी अनाजों से पोषण के मामले में श्रेष्ठ होते हैं । • मोटे अनाजों में पोषण और स्वास्थ्य से जुड़े अनेक फायदों के प्रति लोगों में जागरूकता फैलाना और मोटे अनाजों के सेवन को बढ़ावा देना । 	2

	(केवल दो बिंदु अपेक्षित)	
2	निम्नलिखित काव्यांश को ध्यानपूर्वक पढ़कर उस पर आधारित पूछे गए प्रश्नों के उत्तर लिखिए :	7
(क)	(iii) व्यंग्य	1
(ख)	(i) शहर के पढ़े-लिखे नौजवानों का ।	1
(ग)	(iii) कथन सही है और कारण कथन की सही व्याख्या है ।	1
(घ)	<ul style="list-style-type: none"> • वहाँ शहर की तरह उसके अनुकूल वातावरण नहीं है । • वहाँ उसके प्रशंसक नहीं है । • वहाँ उसकी उपयोगिता नहीं है । 	2
	(केवल दो बिंदु अपेक्षित)	
(ङ)	किसान को फूलने के बाद फ़सल देने वाले फूल भाते हैं क्योंकि फ़सल ही उसकी जीविका का साधन है ।	2
	(केवल दो बिंदु अपेक्षित)	
	खंड - ख (व्यावहारिक व्याकरण)	16
3	निर्देशानुसार 'रचना के आधार पर वाक्य भेद' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिए :	4×1=4
(क)	नवाब साहब ने तौलिया झाड़कर सामने बिछा लिया ।	1
(ख)	जब हालदार साहब उधर से गुजरे तब उन्हें मूर्ति में कुछ अंतर दिखाई दिया ।	1
(ग)	मनू के एक इशारे पर लड़कियाँ कक्षा से बाहर निकलीं और नारे लगाने लगीं ।	1
(घ)	मिश्र वाक्य ।	1
(ङ)	संज्ञा उपवाक्य ।	1
4	निर्देशानुसार 'वाच्य' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिए :	4×1=4
(क)	पतोहू द्वारा भगत को दुनियादारी से निवृत्त कर दिया गया था ।	1
(ख)	नवाब साहब ने खीरे पर मसाला छिड़का ।	1
(ग)	आओ, पेड़ की छाया में बैठा जाए ।	1
(घ)	मैं यह काम नहीं कर सकता ।	1
(ङ)	कर्मवाच्य ।	1
5	निर्देशानुसार 'पद परिचय' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के रेखांकित पदों का पद-परिचय लिखिए :	4×1=4
(क)	शीला अग्रवाल - व्यक्तिवाचक संज्ञा, स्त्रीलिंग, एकवचन, कर्म कारक ।	1
(ख)	पनियाती- गुणवाचक विशेषण, विशेष्य 'फाँके', बहुवचन ।	1
(ग)	बढ़ता है- अकर्मक क्रिया, वर्तमान काल, एकवचन, पुल्लिंग, कर्तृवाच्य ।	1
(घ)	अँगुलियाँ- रीतिवाचक क्रिया विशेषण, 'चल रही थीं' क्रिया की विशेषता ।	1
(ङ)	शाबाश -विस्मयादिबोधक अव्यय, प्रसन्नता सूचक ।	1
6	निर्देशानुसार 'अलंकार' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों की रेखांकित काव्य पंक्तियों में अलंकार पहचान कर लिखिए :	4×1=4
(क)	रूपक अलंकार ।	1
(ख)	उपमा अलंकार ।	1
(ग)	अतिशयोक्ति अलंकार ।	1

(घ)	मानवीकरण अलंकार ।	1
(ङ)	उत्प्रेक्षा अलंकार ।	1
	खंड - ग (पाठ्य पुस्तक एवं पूरक पाठ्य पुस्तक)	30
7	निम्नलिखित पठित गद्यांश पर आधारित बहुविकल्पीय प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए :	5×1=5
(क)	(iii) कथन (I) और (IV) सही हैं ।	1
(ख)	(ii) आत्मा ।	1
(ग)	(iii) कथन सही है और कारण कथन की सही व्याख्या है ।	1
(घ)	(iv) कथन (II) और (III) सही हैं ।	1
(ङ)	(iv) वह पुनर्विवाह कर ले ।	1
8	निर्धारित गद्य पाठों के आधार पर निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में लिखिए :	3×2=6
(क)	<ul style="list-style-type: none"> हालदार साहब का व्यक्तित्व देशभक्ति की भावना से ओतप्रोत था । वे शहीदों और देशभक्तों का सम्मान करते थे । देश भक्ति का मज़ाक उड़ाया जाना पसंद नहीं करते थे । वे स्वभाव से भावुक थे । (किन्हीं दो बिंदुओं का उल्लेख अपेक्षित)	2
(ख)	<p>लेखिका मन्नू भंडारी ने अपनी माँ की तुलना धरती से इसलिए की है :</p> <ul style="list-style-type: none"> धरती की तरह उनकी माँ में भी असीम धैर्य और सहनशक्ति थी। उन्होंने भी धरती की तरह केवल देना ही सीखा था, किसी से कुछ पाने की इच्छा नहीं रखी थी । अपने शांत स्वभाव के कारण वे सहनशील थीं। पिता की ज़्यादतियाँ और बच्चों की फ़रमाइशें मानती थीं। (किन्हीं दो बिंदुओं का उल्लेख अपेक्षित)	2
(ग)	सुमधुर सुरीले सुरों को सुनकर व्यक्ति इतना भाव-विभोर हो जाता है कि उसकी आँखों से आँसू निकल आते हैं। ये आँसू सच्चे मोती की तरह होते हैं। इनके निकल आने पर सुर की परीक्षा हो जाती है। बिस्मिल्ला खाँ नमाज़ के बाद सज़दे में खुदा से ऐसे ही सुर की माँग करते थे, वे सुर को खुदा की देन मानते थे। उनके लिए सुरों से बढ़कर कोई चीज़ कीमती नहीं थी।	2
(घ)	<p>लेखक संस्कृति-असंस्कृति और सभ्यता-असभ्यता के भ्रमजाल में फँसे मनुष्यों से प्रश्न करता है कि :</p> <ul style="list-style-type: none"> मनुष्य की जो योग्यता उससे आत्म-विनाश के साधनों का आविष्कार कराती है, उसे संस्कृति कहना उचित है या असंस्कृति ? इसी प्रकार जिन साधनों के बल पर वह दिन-रात आत्म-विनाश में जुटा हुआ है, उसे सभ्यता समझे या असभ्यता ? यदि संस्कृति का कल्याण की भावना से नाता टूट जाएगा तो असंस्कृति होकर रह जाएगी । और ऐसी संस्कृति का अवश्यंभावी परिणाम असभ्यता के अतिरिक्त दूसरा क्या होगा ? (किन्हीं दो बिंदुओं का उल्लेख अपेक्षित)	2

9	निम्नलिखित पठित काव्यांश पर आधारित बहुविकल्पीय प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए :	5×1=5
(क)	(iv) मुख्य गायक के लिए ।	1
(ख)	(i) कथन (I) और (II) सही हैं ।	1
(ग)	(iii) कथन सही है और कारण कथन की सही व्याख्या है ।	1
(घ)	(iv) मुख्य गायक के टूटते स्वर में अपना स्वर मिलाकर ।	1
(ङ)	(ii) संगतकार मुख्य गायक का मान बनाए रखना चाहता है ।	1
10	निर्धारित कविताओं के आधार पर निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में लिखिए :	3×2=6
(क)	जब गोपियों ने देखा कि : <ul style="list-style-type: none"> जिस कृष्ण की वे बहुत समय से प्रतीक्षा कर रही थीं, वे नहीं आए। उनकी जगह कृष्ण से दूर ले जाने वाला योग-संदेश आ गया तो उन्हें इसमें कृष्ण की एक चाल नज़र आई। वे इसे अपने साथ किया छल समझने लगीं। इसीलिए उन्होंने आरोप लगाया कि हरि हैं राजनीति पढ़ि आए। कृष्ण को अब राजनीति का ज्ञान हो गया है । (किन्हीं दो बिंदुओं का उल्लेख अपेक्षित)	2
(ख)	<ul style="list-style-type: none"> सारे राजाओं के मारे जाने की बात सुनकर लक्ष्मण मुसकराने लगे। उन्होंने परशुराम जी से व्यंग्य भरे स्वर में कहा कि बचपन में हमने बहुत-सी धनुहियाँ तोड़ी थी, तब तो आपने ऐसा क्रोध कभी नहीं किया। इस धनुष से आपका इतना मोह क्यों है ? 	2
(ग)	प्रकृति के सौंदर्य का जो चित्र 'अट नहीं रही है' कविता उपस्थित करती है : <ul style="list-style-type: none"> कविता में फागुन ऋतु का वर्णन है । प्रकृति का अनुपम सौंदर्य देखने को मिलता है । चारों ओर हरियाली, पेड़-पौधों में नई पत्तियाँ, नए फूल आ जाते हैं । सुगंधित हवा बहती रहती है । हर तरफ इतना अधिक प्राकृतिक सौंदर्य नज़र आता है, जिसका आँखों में समा पाना भी मुश्किल है । (किन्हीं दो बिंदुओं का उल्लेख अपेक्षित)	2
(घ)	'आत्मकथ्य' कविता के माध्यम से <ul style="list-style-type: none"> कवि जयशंकर प्रसाद जी ने अपनी भूलों को स्वीकारने, अपने जीवन की असफलताओं का वर्णन और सरलता के कारण धोखा खाने की स्वीकारोक्ति करने के अलावा वर्तमान के यथार्थ को स्वीकार कर साहसपूर्ण कार्य किया है । कवि द्वारा यह कहना-छोटे से जीवन की कैसे बड़ी कथाएँ आज कहीं उनकी ईमानदारी का प्रमाण है । 	2
11	पूरक पाठ्य पुस्तक के निर्धारित पाठों पर आधारित निम्नलिखित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 50-60 शब्दों में लिखिए :	2×4=8
(क)	'माता का अँचल' पाठ में ग्राम्य संस्कृति के जिस रूप का चित्रण है वह आधुनिक युग में परिवर्तित हो चुकी है -	4

	<ul style="list-style-type: none"> • संचार माध्यम व शहरी संस्कृति के कारण वहाँ के लोगों की जीवन-शैली बदल चुकी है। • संयुक्त परिवारों का स्थान एकल परिवारों ने ले लिया है। • खेल व खेलने की सामग्री बदल गई है। • बच्चे मोबाइल, लैपटॉप का प्रयोग करने लगे हैं। • आज गाँव के नागरिक हर क्षेत्र की जानकारी रखते हैं। • वे परिवेश के प्रति जागरूक हैं। उत्तम खाद, बीज व कृषि-साधनों का प्रयोग करते हैं। • बैंक की सुविधा उन्हें प्राप्त है। <p>(किन्हीं चार बिंदुओं का उल्लेख अपेक्षित)</p>	
(ख)	<p>यात्राएँ मनुष्य को भाव शून्य होने से रोकती हैं -</p> <ul style="list-style-type: none"> • मनुष्य की नीरस होती जीवन-शैली से मुक्ति दिलाने में यात्राएँ बहुत महत्वपूर्ण भूमिका निभाती हैं। • मनोरंजन, ज्ञानवर्धन एवं अज्ञात स्थलों की जानकारी के साथ-साथ भाषा एवं संस्कृति का भी आदान-प्रदान होता है। • 'साना-साना हाथ जोड़ि' यात्रा-वृत्तांत में लेखिका की सिक्किम की यात्रा बहुत ही मोहक, आकर्षक एवं आनंदपूर्ण थी। • वहाँ का अनुपम सौंदर्य उनकी आत्मा को छू गया था। • लेखिका प्रकृति की अभूतपूर्व सुंदरता, विराटता तथा महिमा से सम्मोहित हो उठीं। • फूलों की घाटियाँ, झर-झर गिरते जल-प्रपात तथा गहनतम खाइयों ने उनका मन मोह लिया। प्राकृतिक सौंदर्य से आसक्त होकर उनका यह सोचना कि जीवन का आनंद इसी सौंदर्य में है, यह स्पष्ट करता है कि यात्राएँ मनुष्य के जीवन में परिवर्तन लाने में सक्षम हैं। <p>(किन्हीं चार बिंदुओं का उल्लेख अपेक्षित)</p>	4
(ग)	<p>'मैं क्यों लिखता हूँ' पाठ के आधार पर भीतरी विवशता :</p> <ul style="list-style-type: none"> • किसी भी दृश्य या घटना को देखकर या सुनकर जब मन में अनुभूति की प्रबलता हो, वही भीतरी विवशता होती है। • जब तक कवि या लेखक उसे शब्दों में अभिव्यक्त नहीं करता तब तक उसे शांति नहीं मिलती। • लेखक ने इसे स्पष्ट करने के लिए हिरोशिमा पर लिखी कविता की चर्चा की है। 	4
	<p>खंड - घ (रचनात्मक लेखन)</p>	20
12	<p>निम्नलिखित तीन विषयों में से <u>किसी एक</u> विषय पर संकेत बिन्दुओं के आधार पर लगभग 120 शब्दों में एक अनुच्छेद लिखिए :</p> <p><u>अनुच्छेद लेखन</u></p> <ul style="list-style-type: none"> • भूमिका 1 अंक • विषयवस्तु 3 अंक • निष्कर्ष 1 अंक • भाषा शुद्धता 1 अंक 	1×6=6

13	<p>किसी एक विषय पर लगभग 100 शब्दों में पत्र लिखिए :</p> <p><u>पत्र-लेखन</u></p> <ul style="list-style-type: none"> • प्रारूप (प्रारंभ और अंत की औपचारिकताएँ) 1 अंक • विषयवस्तु 3 अंक • भाषा शुद्धता 1 अंक 	1×5=5
14	<p><u>स्ववृत्त लेखन</u></p> <ul style="list-style-type: none"> • प्रारूप 1 अंक • विषयवस्तु 3 अंक • भाषा शुद्धता 1 अंक <p>अथवा</p> <p><u>ई - मेल</u></p> <ul style="list-style-type: none"> • प्रारूप 1 अंक • विषयवस्तु 3 अंक • भाषा शुद्धता 1 अंक 	1×5=5
15	<p><u>विज्ञापन लेखन</u></p> <ul style="list-style-type: none"> • रचनात्मक प्रस्तुति 1 अंक • विषयवस्तु 2 अंक • भाषा शुद्धता 1 अंक <p>अथवा</p> <p><u>संदेश लेखन</u></p> <ul style="list-style-type: none"> • प्रारूप 1 अंक • विषयवस्तु 2 अंक • भाषा शुद्धता 1 अंक 	1×4=4

MATHEMATICS (BASIC) – Code No. 241
SAMPLE QUESTION PAPER
CLASS - X (2025 - 26)

Maximum marks:80

Time :3 hour

General Instructions

Read the following instructions carefully and follow them:

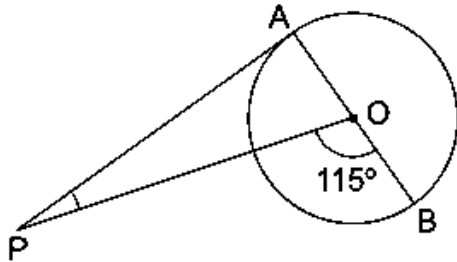
1. This question paper contains 38 questions. All Questions are compulsory.
2. This Question Paper is divided into 5 Sections A, B, C, D and E.
3. In Section A, Question numbers 1-18 are multiple choice questions (MCQs) and question no.19 and 20 are Assertion- Reason based questions of 1 mark each.
4. 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 $\pi = \frac{22}{7}$ wherever required if not stated.
10. Use of calculators is not allowed.

SECTION – A (Multiple Choice Questions) <i>Each MCQ of 1mark, has four options with only one correct option, choose the correct option</i>		
Q. No.	Question	Marks
Q1.	The exponent of 3 in the prime factorization of 2025 is A) 1 B) 2 C) 3 D) 4	1
Q2.	If $2024x + 2025y = 1$; $2025x + 2024y = -1$, then $x - y =$ A) 0 B) -2 C) 2 D) -1	1

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Q3.	<p>The number of polynomials having -2 and 5 as its zeroes is</p> <p>A) one B) two C) three D) Infinitely many</p>	1
Q4.	<p>Which of the following is not a quadratic equation?</p> <p>A) $(x + 2)^2 = 2(x + 3)$ B) $x^2 + 3x = (-1)(1 - 3x^2)$ C) $(x + 2)(x - 1) = x^2 - 2x - 3$ D) $x^3 - x^2 + 2x + 1 = (x + 1)^3$</p>	1
Q5.	<p>The value of x for which $2x$, $(x + 10)$ and $(3x + 2)$ are the three consecutive terms of an AP is</p> <p>A) 6 B) -6 C) -2 D) 2</p>	1
Q6.	<p>If $1 + 2 + 3 + 4 + \dots + 50 = 25k$, then $k =$</p> <p>A) 50 B) 51 C) 49 D) 26</p>	1
Q7.	<p>The distance between the points $(\cos 30^\circ, \sin 30^\circ)$ and $(\cos 60^\circ, -\sin 60^\circ)$ is</p> <p>A) 0 unit B) $\sqrt{3}$ units C) 1 unit D) $\sqrt{2}$ units</p>	1
Q8.	<p>The co-ordinates of the point which is mirror image of the point $(-3, 5)$ about x-axis are</p> <p>A) $(3, 5)$ B) $(3, -5)$ C) $(-3, -5)$ D) $(-3, 5)$</p>	1
Q9.	<p>If in $\triangle ABC$ and $\triangle DEF$, $\frac{AB}{EF} = \frac{AC}{DE}$ then they will be similar when</p> <p>A) $\angle A = \angle D$ B) $\angle A = \angle E$ C) $\angle C = \angle F$ D) $\angle B = \angle E$</p>	1

<p>Q10.</p>	<p>If $\triangle ABC \sim \triangle PQR$, then perimeter of the triangle PQR (in cm) is</p> <p>A) 12 B) 24 C) 18 D) 20</p> <div data-bbox="714 168 1380 441"> </div> <p>For visually Impaired students only</p> <p>If $\triangle ABC \sim \triangle PQR$, where $AB = 3\text{cm}$, $BC = 4\text{cm}$, $AC = 5\text{cm}$ and $PR = 10\text{cm}$, then perimeter of the triangle PQR (in cm) is</p> <p>A) 12 B) 24 C) 18 D) 20</p>	<p>1</p>
<p>Q11.</p>	<p>In the figure given below, radius r of the circle which touches the sides of the triangle is</p> <p>A) 3 cm B) 6 cm C) 7 cm D) 4 cm</p> <div data-bbox="925 903 1315 1281"> </div> <p>For visually Impaired students only</p> <p>From a point P, which is at a distance of 26cm from the centre O of a circle with radius 10 cm, the pair of tangents PQ and PR to the circle are drawn. Then the area of the quadrilateral PQOR (in cm^2) is</p> <p>A) 220 B) 240 C) 260 D) 280</p>	<p>1</p>
<p>Q12.</p>	<p>Which one of the following is not equal to Unity?</p> <p>A) $\sin^2 x + \cos^2 x$ B) $\cot^2 x - \operatorname{cosec}^2 x$ C) $\sec^2 x - \tan^2 x$ D) $\tan x \cdot \cot x$</p>	<p>1</p>

Q13.	<p>Consider the following frequency distribution</p> <table border="1"><tr><td>Class</td><td>0 – 5</td><td>5 – 10</td><td>10 – 15</td><td>15 – 20</td><td>20 – 25</td></tr><tr><td>Frequency</td><td>11</td><td>12</td><td>13</td><td>9</td><td>11</td></tr></table> <p>The upper limit of median class is</p> <p>A) 10 B) 13 C) 15 D) 20</p>	Class	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25	Frequency	11	12	13	9	11	1
Class	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25									
Frequency	11	12	13	9	11									
Q14.	<p>Let empirical relationship between the three measures of central tendency be $a(\text{Median}) = \text{Mode} + b(\text{Mean})$, then $(2b + 3a) =$</p> <p>A) 11 B) 12 C) 13 D) 14</p>	1												
Q15.	<p>From an external point Q, the length of tangent to a circle is 12 cm and the distance of Q from the centre of circle is 13 cm. The radius of circle (in cm) is</p> <p>A) 10 B) 5 C) 12 D) 7</p>	1												
Q16.	<p>In the given figure, PA is a tangent from an external point P to a circle with centre O and diameter AB. If $\angle POB = 115^\circ$, then measure of $\angle APO$ is</p> <p>A) 25° B) 30° C) 20° D) 65°</p> <div></div> <p>For visually Impaired students only</p> <p>At one end A of a diameter AB of a circle with radius 13 cm, tangent XAY is drawn to the circle. The length of the chord CD parallel to XY and at a distance 18 cm from A is</p> <p>A) 24 cm B) 25 cm C) 26 cm D) 18 cm</p>	1												

Q17.	<p>The circumferences of two circles are in the ratio 3 : 4. The ratio of their areas is</p> <p>A) 3 : 4 B) 4 : 3 C) 9 : 16 D) 16 : 9</p>	1
Q18.	<p>An event is most unlikely to happen. Its probability is</p> <p>A) 0.0001 B) 0.001 C) 0.01 D) 0.1</p>	1
	<p>Each of the following questions contains two statements i.e., ASSERTION and REASON, and has following four choices. Only one of which is the correct answer.</p>	
Q19.	<p>ASSERTION (A): Line joining the midpoints of two sides of triangle is parallel to the third side.</p> <p>REASON (R): If a line divides two sides of a triangle in the same ratio then it is parallel to the third side.</p> <p>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.</p>	1
Q20.	<p>ASSERTION (A): Two coins are tossed simultaneously. Possible outcomes are two heads, one head and one tail, two tails. Hence, the probability of getting two heads is $\frac{1}{3}$.</p> <p>REASON (R): Probabilities of 'equally likely' outcomes of an experiment are always equal.</p> <p>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.</p>	1

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SECTION – B
(Very Short Answers)

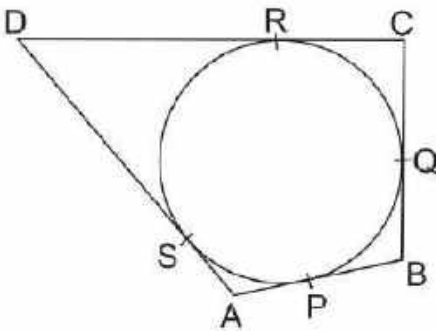
This section comprises of VSA of 2 marks each

Q21.	<p>(A) Show that the number $2 \times 5 \times 7 \times 11 + 11 \times 13$ is a composite number.</p> <p style="text-align: center;">OR</p> <p>(B) Find the smallest number which is divisible by both 306 and 657.</p>	2
Q22.	<p>Find the radius of the circle with centre at origin, if line l given by $x + y = 5$ is tangent to the circle at point P.</p> <div style="text-align: center;"> <p>The diagram shows a circle with center C(0, 0). A horizontal line l is tangent to the circle at point P(3, a). A dashed vertical line segment connects the center C(0, 0) to the point of tangency P(3, a).</p> </div> <p>For visually Impaired students only</p> <p>Find the radius of the circle whose end points of a diameter are (0, 0) and (6, 8).</p>	2
Q23.	If the zeroes of the quadratic polynomial $x^2 + (a + 1)x + b$ are 2 and -3 , then find the values of a and b .	2
Q24.	Find the nature of roots of the quadratic equation $x^2 + 4x - 3\sqrt{2} = 0$.	2
Q25.	<p>(A) Evaluate : $2 \sin 30^\circ \tan 60^\circ - 3 \cos^2 60^\circ \sec^2 30^\circ$</p> <p style="text-align: center;">OR</p> <p>(B) If $\sin x = \frac{7}{25}$, where x is an acute angle, then find the value of $\sin x \cdot \cos x (\tan x + \cot x)$.</p>	2

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SECTION – C
(Short Answers)

This section comprises of SA type questions of 3 marks each

Q26.	Show that $\sqrt{2} - \sqrt{5}$ is an irrational number.	3																										
Q27.	<p>(A) The frequency distribution table of agriculture holdings in a village is given below:</p> <table border="1"><tr><td>Area of land (in hectares)</td><td>1 – 3</td><td>3 – 5</td><td>5 – 7</td><td>7 – 9</td><td>9 – 11</td><td>11 – 13</td></tr><tr><td>No. of families</td><td>20</td><td>45</td><td>80</td><td>55</td><td>40</td><td>12</td></tr></table> <p>Find the modal agriculture holdings of the village.</p> <p style="text-align: center;">OR</p> <p>(B) If the mean of the following distribution is 54, find the value of p.</p> <table border="1"><tr><td>Class Interval</td><td>0 – 20</td><td>20 – 40</td><td>40 – 60</td><td>60 – 80</td><td>80 – 100</td></tr><tr><td>Frequency</td><td>7</td><td>p</td><td>10</td><td>9</td><td>13</td></tr></table>	Area of land (in hectares)	1 – 3	3 – 5	5 – 7	7 – 9	9 – 11	11 – 13	No. of families	20	45	80	55	40	12	Class Interval	0 – 20	20 – 40	40 – 60	60 – 80	80 – 100	Frequency	7	p	10	9	13	3
Area of land (in hectares)	1 – 3	3 – 5	5 – 7	7 – 9	9 – 11	11 – 13																						
No. of families	20	45	80	55	40	12																						
Class Interval	0 – 20	20 – 40	40 – 60	60 – 80	80 – 100																							
Frequency	7	p	10	9	13																							
Q28.	<p>A quadrilateral ABCD is drawn to circumscribe a circle, as shown in the given figure. Show that $\frac{AB + CD}{AD + BC} = 1$</p> <div></div> <p>For visually Impaired students only</p> <p>Show that parallelogram circumscribing a circle is a rhombus.</p>	3																										


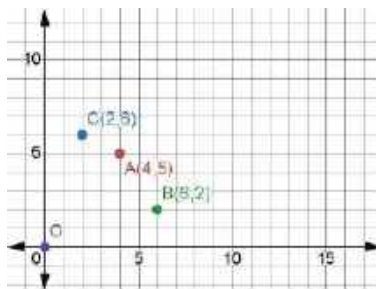
*Please note that the assessment scheme of the Academic Session 2024-25 will continue in the current session i.e. 2025-26

Q29.	<p>(A) On a particular day, 50000 people attended a Cricket Test Match between India and Australia in Sydney Cricket Ground. Let x be the number of adults attended the cricket match and y be the number of children attended the cricket match. Cost of an adult ticket was ₹1000 while cost of a child ticket was ₹200. On that day Revenue earned by selling all 50,000 tickets, was ₹4,20,00,000. Find how many adults and how many children attended the cricket match?</p> <p style="text-align: center;">OR</p> <p>(B) Solve for x and y, graphically: $2x + y = 6$; $x + y = 5$</p> <p>For visually Impaired students only</p> <p>(A) On a particular day, 50000 people attended a Cricket Test Match between India and Australia in Sydney Cricket Ground. Let x be the number of adults attended the cricket match and y be the number of children attended the cricket match. Cost of an adult ticket was ₹1000 while cost of a child ticket was ₹200. On that day Revenue earned by selling all 50,000 tickets, was ₹4,20,00,000. Find how many adults and how many children attended the cricket match.</p> <p style="text-align: center;">OR</p> <p>(B) A 2-digit number is 6 times the sum of its digits. The number formed by reversing the digits is 9 less than the given number. Find the number.</p>	3
Q30.	Prove that : $(\sin x - \cos x + 1) \cdot (\sec x - \tan x) = (\sin x + \cos x - 1)$	3
Q31.	The sum of first n terms of an AP is $5n^2 - n$. Find the n^{th} term of the AP.	3
SECTION – D (Long Answers) <i>This section comprises of LA type questions of 5 marks each</i>		
Q32.	Prove that a line drawn parallel to one side of a triangle intersecting other two sides in distinct points, divides the other two sides in the same ratio.	5
Q33.	<p>(A) The numerator of a fraction is 3 less than its denominator. If 2 is added to both of its numerator and denominator then the sum of the new fraction and original fraction is $\frac{29}{20}$. Find the original fraction.</p> <p style="text-align: center;">OR</p> <p>(B) A train covers a distance of 300 km at a uniform speed. If the speed of the train is increased by 5 km/hr, it takes 2 hours less in the journey. Find the original speed of the train.</p>	5

Q34.	<p>(A) The angle of elevation of the top of a chimney from the foot of a tower is 60° and the angle of depression of the foot of the chimney from the top of the tower is 30°. If the height of the tower is 40 meters, find the height of the chimney. Also, find the length of the wire tied from the top of the chimney to the top of tower.</p> <p style="text-align: center;">OR</p> <p>(B) The angles of depression of the top and bottom of a 50m high building from the top of a tower are 45° and 60° respectively. Find the height of the tower and the horizontal distance between the tower and the building. (Use $\sqrt{3} = 1.73$)</p>	5
Q35.	A solid toy is in the form of a hemisphere surmounted by a right circular cone of height 2cm and diameter of base 4cm. If a right circular cylinder circumscribes the toy, find the difference of the volumes of the cylinder and the toy. [Use $\pi = 3.14$]	5

SECTION - E
(Case-study Based Questions)

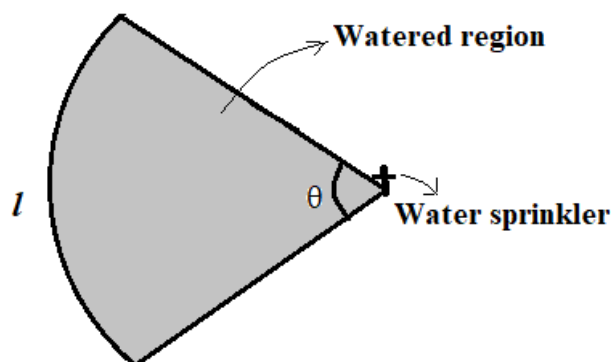
This section comprises of 3 case-study based questions of 4 marks each with three sub-parts.

Q36.	<p>Carpooling is the sharing of car journeys so that more than one person travels in a car, and prevents the need for others to have to drive to a location themselves. By having more people using one vehicle, carpooling reduces each person's travel costs such as: fuel costs, tolls, and the stress of driving. Carpooling is also a more environmentally friendly and sustainable way to travel as sharing journeys reduces air pollution, carbon emissions, traffic congestion on the roads, and the need for parking spaces.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>Three friends Amar, Bhavin and Chetanya live in societies represented by the points A(4,5), B(6,2) and C(2,6) respectively. They all work in offices located in a same building represented by the point O(0,0). Since they all go to same building every day, they decided to do carpooling to save money on petrol. Based on the above information, answer the following questions.</p> <div style="display: flex; justify-content: space-between;"> <div> <p>i) What is the distance between B and C?</p> <p>ii) If Bhavin and Chetanya planned to meet at a club situated at the mid-point of the line joining the points B and C, find the coordinates of this point.</p> <p>iii) (A) Which society is farthest from the office? Also find its distance from the office.</p> <p style="text-align: center;">OR</p> <p>(B) Out of B and C which society is nearer to A? Also find their distances.</p> </div> <div style="text-align: right; vertical-align: top;"> <p>1</p> <p>1</p> <p>2</p> </div> </div>	
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- Q37. A water sprinkler is a device used to irrigate agricultural crops, lawns, landscapes, golf courses, and other areas. Water sprinklers can be used for residential, industrial, and agricultural usage.



A water sprinkler is set to shoot a stream of water a distance of 21 m and rotate through an angle which is equal to complementary angle of 10° .



- i) What is the area of sector in terms of arc length?
- ii) What is the area of the watered region (in terms of π)?
- iii) **(A)** If the radius(r) changes to 28m, find the angle θ so that the area of the watered region remains the same.

OR

(B) If the radius(r) is increased from 21m to 28m and the angle remains the same, what is the increase in the area of the watered region?

1

1

2

Q38.

One of four main blood types can be found in a human body. They are known as A, B, AB and O. Each blood type can be further classified as either a Rhesus positive (+) or Rhesus negative (-). For example, a possible combination is blood type O and Rhesus negative which is written as O^-

The data below shows the distribution of the blood types and Rhesus types of given blood type for a **Blood Donation Center** recorded (in percentages) for the year 2023.

BLOOD GROUP	RHESUS FACTOR	NUMBER OF PERSONS (in %)
O	O^-	x
	O^+	30
A	A^-	8
	A^+	24
B	B^-	6
	B^+	18
AB	AB^-	1
	AB^+	3



- i) Find the value of x .
- ii) Find the probability that a randomly selected person has a Rhesus negative blood type.
- iii) **(A)** What is the probability that the person selected from the record is Rhesus positive but neither blood type A nor B?

1
1
2

OR

(B) People with blood type AB positive (AB^+) are known as the universal recipient and with blood type O negative (O^-) are known as universal donor. Find the probability of a selected person to be neither universal recipient nor universal donor.

MATHEMATICS BASIC – Code No. 241
MARKING SCHEME
CLASS - X (2025 - 26)

SECTION - A		
Q. No.	Answer	Marks
1.	Answer – D As, $2025 = 3^4 \times 5^4$ So, the exponent of 3 in the prime factorization of 2025 is 4	1
2.	Answer – B On subtracting first equation from second equation, we get $2025x + 2024y - 2024x - 2025y = -1 - 1 \Rightarrow (x - y) = -2$	1
3.	Answer – D As, $f(x) = k(x + 2)(x - 5) \Rightarrow f(x) = k(x^2 - 3x - 10), k \neq 0$ Since k can be any real number. So, there are Infinitely many such polynomials.	1
4.	Answer – C On simplification, given equations reduce to (A) $x^2 + 2x - 2 = 0$ (Quadratic Equation) (B) $2x^2 - 3x - 1 = 0$ (Quadratic Equation) (C) $3x + 1 = 0$ (NOT a Quadratic Equation) (D) $4x^2 + x = 0$ (Quadratic Equation)	1
5.	Answer – A As, $2(x + 10) = (3x + 2) + 2x \Rightarrow x = 6$	1
6.	Answer – B As, $\frac{50(51)}{2} = 25k \Rightarrow k = 51$	1
7.	Answer – D Distance between the given points = $\sqrt{\left(\frac{1}{2} - \frac{\sqrt{3}}{2}\right)^2 + \left(\frac{1}{2} + \frac{\sqrt{3}}{2}\right)^2} = \sqrt{2}$	1
8.	Answer – C We know that, for the coordinates of a mirror image of a point in x-axis, abscissa remains the same and ordinate will be of opposite sign of the ordinate of given point. So, the Mirror image of the point $(-3, 5)$ about x-axis is $(-3, -5)$.	1
9.	Answer – B As, $\triangle ABC \sim \triangle EFD \Rightarrow \angle A = \angle E$	1

10.	Answer – B As, $\triangle ABC \sim \triangle PQR \Rightarrow \frac{AB}{PQ} = \frac{BC}{QR} = \frac{AC}{PR} = \frac{1}{2} \Rightarrow PQ = 6 \text{ cm}, QR = 8 \text{ cm}$ Perimeter of the triangle PQR (in cm) = $6 + 8 + 10 = 24$	1
	<u>Question given for Visually impaired candidates</u> Answer – B The solution is same as above.	1
11.	Answer – A From the figure, $AE = 24 - r = AF$. So, $BF = 1 + r = 7 - r \Rightarrow r = 3 \text{ cm}$	1
	<u>Question given for Visually Impaired candidates</u> Answer – B As, $PQ = PR = 24 \text{ cm}$ So, Area of Quadrilateral PQOR (in cm^2) = $2 \times \frac{1}{2} \times 24 \times 10 = 240$	1
12.	Answer – B As, $\cot^2 x - \operatorname{cosec}^2 x = -1$, so it is NOT equal to Unity	1
13.	Answer – C As, Median class is 10-15. So, its upper limit is 15.	1
14.	Answer – C Since, $3 \text{ Median} = \text{Mode} + 2 \text{ Mean}$. So, a = 3 & b = 2 . Thus, $(2b + 3a) = 4 + 9 = 13$	1
15.	Answer – B Radius (in cm) = $\sqrt{13^2 - 12^2} = 5$	1
16.	Answer – A As, $\angle PAO = 90^\circ$. So, $\angle APO = 115^\circ - 90^\circ = 25^\circ$	1
	<u>Question given for Visually Impaired candidates</u> Answer – A As, the chord is at a distance of 18 cm (more than the radius). So, the chord will be at a distance of 5 cm on the opposite side of the centre. Thus, length of the chord CD will be $2\sqrt{13^2 - 5^2} = 24 \text{ cm}$	1
17.	Answer – C As, $r_1 : r_2 = 3 : 4$. So, the ratio of their areas = $r_1^2 : r_2^2 = 9 : 16$	1
18.	Answer – A Since, the event is most unlikely to happen. Therefore, its probability is 0.0001	1
19.	Answer – A As, Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).	1

20.	Answer – D Since events given in Assertion are not equally likely, so probability of getting two heads is not $\frac{1}{3}$. Thus, Assertion (A) is false but reason (R) is true.	1
Section –B [This section comprises of solution of very short answer type questions (VSA) of 2 marks each]		
21 (A).	It can be observed that, $2 \times 5 \times 7 \times 11 + 11 \times 13 = 11 \times (70 + 13) = 11 \times 83$ which is the product of two factors other than 1. Therefore, it is a composite number. OR	1 1
21 (B).	The smallest number which is divisible by any two numbers is their LCM. So, Number which is divisible by both 306 and 657 = LCM (306, 657) Since, $306 = 2^1 \times 3^2 \times 17^1$ and $657 = 3^2 \times 73$ $LCM (306, 657) = 2^1 \times 3^2 \times 17^1 \times 73 = 22338$	$\frac{1}{2}$ 1 $\frac{1}{2}$
22.	As, P(3, a) lies on the line L, so $3 + a = 5 \Rightarrow a = 2$ Now, the radius of the circle = $CP = \sqrt{3^2 + 2^2} = \sqrt{13}$ units <u>Question given for Visually Impaired candidates</u> Diameter of the circle = Distance between (0,0) and (6,8) = $\sqrt{6^2 + 8^2} = 10$ Radius of the circle = $\frac{1}{2}$ (Diameter of the circle) = 5 units	1 1 1½ $\frac{1}{2}$
23.	Sum of the zeroes = $2 - 3 = -(a + 1) \Rightarrow a = 0$ Product of the zeroes = $-6 = b \Rightarrow b = -6$ Hence, $a = 0$ & $b = -6$	1 1
24.	Discriminant, $D = 16 + 12\sqrt{2} > 0$ As, Discriminant is positive. So, Roots are real and distinct.	1 1
25 (A).	$2 \sin 30^\circ \tan 60^\circ - 3 \cos^2 60^\circ \sec^2 30^\circ = 2 \left(\frac{1}{2}\right) (\sqrt{3}) - 3 \left(\frac{1}{2}\right)^2 \left(\frac{2}{\sqrt{3}}\right)^2$ $= \sqrt{3} - 1$ OR	1½ $\frac{1}{2}$
25 (B).	As, $\sin x \cdot \cos x (\tan x + \cot x) = \sin x \cdot \cos x \left(\frac{\sin x}{\cos x} + \frac{\cos x}{\sin x} \right)$ $= \sin x \cdot \cos x \left(\frac{1}{\cos x \cdot \sin x} \right)$ $= 1$ (Constant) Since, the value of $\sin x \cdot \cos x (\tan x + \cot x)$ is constant, so its equal 1 for all angles.	$\frac{1}{2}$ 1½

Section –C

[This section comprises of solution short answer type questions (SA) of 3 marks each]

26.

To prove that $(\sqrt{2} - \sqrt{5})$ is an irrational number, we will use the contradiction Method.

Let, if possible, $\sqrt{2} - \sqrt{5} = x$, where x is any rational number (Clearly $x \neq 0$)

$$\text{so, } \sqrt{2} = x + \sqrt{5} \Rightarrow 2 = (x + \sqrt{5})^2$$

$$\Rightarrow 2 = x^2 + 5 + 2\sqrt{5}x$$

$$\Rightarrow -x^2 - 3 = 2\sqrt{5}x$$

$$\Rightarrow \frac{-x^2-3}{2x} = \sqrt{5} \dots\dots(1)$$

(Note: $\sqrt{5}$ is an irrational number, as the square root of any prime number is Always an irrational number)

In equation (1), LHS is a rational number while RHS is an irrational number but an irrational number cannot be equal to a rational number.

So, our assumption is wrong.

Thus, $(\sqrt{2} - \sqrt{5})$ is an irrational number.

1

1

1

27 (A).

Modal class 

Area of land (in hectares)	No. of families	
1 – 3	20	
3 – 5	45	f_0
5 – 7	80	f_1
7 – 9	55	f_2
9 – 11	40	
11 – 13	12	

\therefore Modal class = 5 – 7 , $l = 5$, $h = 2$

$$\text{Mode} = l + \left(\frac{f_1 - f_0}{2f_1 - f_0 - f_2} \right) h = 5 + \left(\frac{80 - 45}{2(80) - 45 - 55} \right) 2 = 6.166\dots$$

Hence, modal agriculture holdings of the village is 6.17 hectare (approx.)

OR

1

2

27 (B).

Class interval	f_i	x_i (Mid-value)	$d_i = \frac{x_i - 30}{h}$	$f_i d_i$
0-20	7	10	-1	-7
20-40	p	30	0	0
40-60	10	50	1	10
60-80	9	70	2	18
80-100	13	90	3	39
Total	39 + p			60

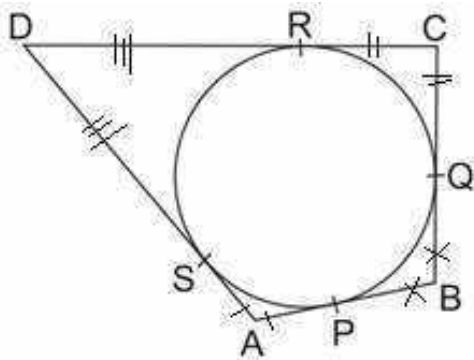
Assumed mean(A) = 30, Width of the interval (h) = 20

$$\text{Mean} = 30 + \frac{60}{39+p} \times 20 = 54 \Rightarrow 50 = 39 + p \Rightarrow p = 11$$

2

1

28.



Tangents drawn to a circle from an external point are equal.

$$\begin{aligned} \text{So, } AP &= AS, \quad PB = BQ, \\ CR &= CQ, \quad DR = DS \end{aligned}$$

On adding the above equations,

$$(AP + PB) + (CR + RD) = (AS + BQ) + (CQ + DS)$$

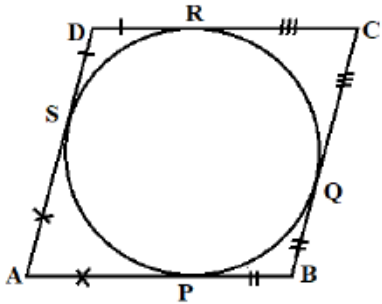
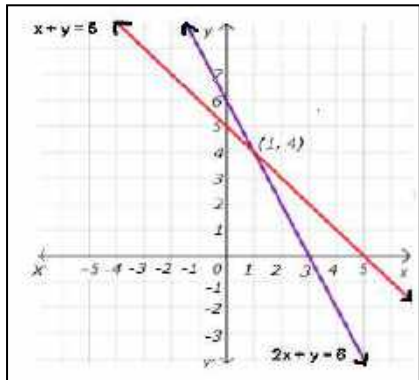
$$\Rightarrow AB + CD = AD + BC$$

$$\Rightarrow \frac{AB + CD}{AD + BC} = 1$$

1½

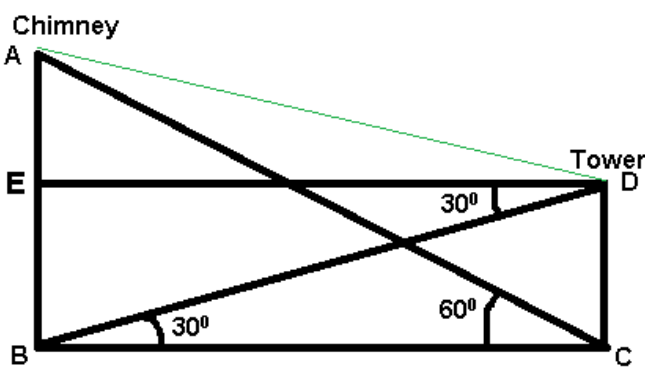
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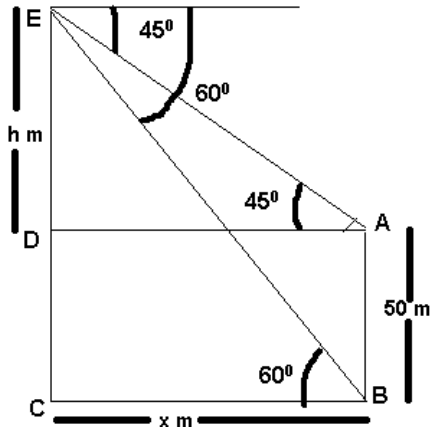
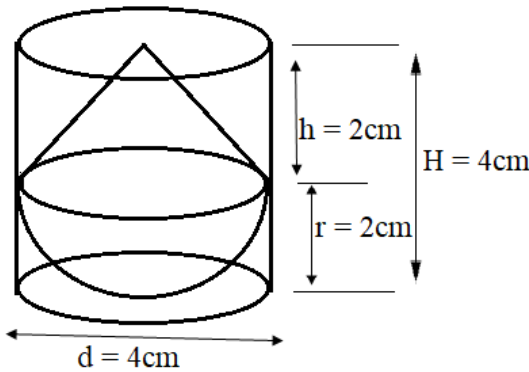
½

	<p><u>Question given for Visually Impaired candidates</u></p> <p>Parallelogram ABCD circumscribes a circle as shown in figure.</p> <p>Tangents drawn to a circle from an external point are equal So, $AP = AS$, $PB = BQ$, $CR = CQ$, $DR = DS$</p> <p>On adding the above equations, $(AP + PB) + (CR + RD) = (AS + BQ) + (CQ + DS)$ $\Rightarrow AB + CD = AD + BC$ $\Rightarrow 2AB = 2BC$ (Opposite sides of parallelogram are equal) Thus, $AB = BC$</p> <p>Since, in Parallelogram ABCD a pair of adjacent sides are equal. Hence, ABCD is a rhombus.</p>	<div></div> <div><p>$1\frac{1}{2}$</p><p>1</p><p>$\frac{1}{2}$</p></div>																
<p>29 (A).</p>	<p>According to the question,</p> $1000x + 200y = 42000000 \Rightarrow 5x + y = 210000 \dots\dots\dots (1)$ $x + y = 50000 \dots\dots\dots (2)$ $(1) - (2) \Rightarrow 4x = 160000$ $\Rightarrow x = 40000$ <p>Substituting value of x in (2), $y = 10000$</p> <p>\therefore Number of adults attended the match is 40000 and number of children attended is 10000</p> <p style="text-align: center;">OR</p>	<div><p>1</p><p>$\frac{1}{2}$</p><p>1</p><p>$\frac{1}{2}$</p></div>																
<p>29 (B).</p>	<div><div>$2x + y = 6$<table><tr><td>x</td><td>2</td><td>3</td><td>0</td></tr><tr><td>y</td><td>2</td><td>0</td><td>6</td></tr></table></div><div>$x + y = 5$<table><tr><td>x</td><td>2</td><td>5</td><td>0</td></tr><tr><td>y</td><td>3</td><td>0</td><td>5</td></tr></table></div></div> <p>Hence solution is $x = 1, y = 4$</p>	x	2	3	0	y	2	0	6	x	2	5	0	y	3	0	5	<div><div></div><div><p>2 For graph</p><p>1</p></div></div>
x	2	3	0															
y	2	0	6															
x	2	5	0															
y	3	0	5															

	<p><u>Question given for Visually Impaired candidates</u></p> <p>29(A) Solution and marks distribution is same as above</p> <p style="text-align: center;">OR</p> <p>29(B) Let unit place digit be x & tens place digit be y \therefore original number = $10y+x$ Reversed number = $10x+y$ Given, $10y + x = 6(x + y)$ $\Rightarrow 5x - 4y = 0 \dots\dots(1)$ And $(10y + x) - (10x + y) = 9$ $\Rightarrow -9x + 9y = 9$ $\Rightarrow x - y = -1 \dots\dots(2)$ On solving (1) and (2), we get $x = 4, y = 5$ \therefore The number is 54</p>	<p>1</p> <p>1</p> <p>1</p>
<p>30.</p>	<p>LHS = $(\sin x - \cos x + 1) \cdot (\sec x - \tan x)$ $= (\sin x - \cos x + 1) \cdot \left(\frac{1 - \sin x}{\cos x}\right)$ $= (1 + \sin x) \left(\frac{1 - \sin x}{\cos x}\right) - \cos x \left(\frac{1 - \sin x}{\cos x}\right)$ $= \left(\frac{1 - \sin^2 x}{\cos x}\right) - (1 - \sin x)$ $= \frac{\cos^2 x}{\cos x} - 1 + \sin x = \sin x + \cos x - 1 = \text{RHS}$</p>	<p>1</p> <p>1</p> <p>1</p>
<p>31.</p>	<p>As, $S_n = 5n^2 - n$</p> <p>Now, nth Term is given by $a_n = S_n - S_{n-1}$</p> <p>$a_n = [5n^2 - n] - [5(n-1)^2 - (n-1)]$ $a_n = 5[n^2 - (n-1)^2] - [n - (n-1)]$ $a_n = 5[2n-1] - [1]$ $a_n = 10n - 6$</p>	<p>$\frac{1}{2}$</p> <p>1</p> <p>$1\frac{1}{2}$</p>
<p>Section –D</p> <p>[This section comprises of solution of long answer type questions (LA) of 5 marks each]</p>		
<p>32.</p>	<p>Given: In $\triangle ABC$, a line / drawn parallel to side BC intersects AB and AC at D and E respectively.</p> <p>To prove: $\frac{AD}{DB} = \frac{AE}{EC}$</p> <p>Construction: Draw perpendicular from D and E to AC and AB i.e., $DM \perp AC$ and $EN \perp AB$. Join DC and BE.</p>	<p>$\frac{1}{2}$</p> <p>$\frac{1}{2}$</p> <p>$\frac{1}{2}$</p>

	<div data-bbox="268 129 667 488" data-label="Image"> </div> <p>Proof:</p> $\frac{ar(\triangle ADE)}{ar(\triangle BDE)} = \frac{\frac{1}{2}(AD)(EN)}{\frac{1}{2}(BD)(EN)} = \frac{AD}{DB} \dots\dots\dots(1)$ $\frac{ar(\triangle ADE)}{ar(\triangle CED)} = \frac{\frac{1}{2}(AE)(DM)}{\frac{1}{2}(EC)(DM)} = \frac{AE}{EC} \dots\dots\dots(2)$ <p>Also, $ar(\triangle BDE) = ar(\triangle CED) \dots\dots\dots(3)$ (Triangles on same base and between same parallel are equal in area)</p> <p>From (1), (2) & (3), we get $\frac{ar(\triangle ADE)}{ar(\triangle BDE)} = \frac{ar(\triangle ADE)}{ar(\triangle CED)}$ $\Rightarrow \frac{AD}{DB} = \frac{AE}{EC}$ (Hence proved)</p>	<p>$\frac{1}{2}$ (for correct figure)</p> <p>1</p> <p>$\frac{1}{2}$</p> <p>$\frac{1}{2}$</p> <p>1</p>
<p>33 (A)</p>	<p>Let the denominator of the required fraction be x Then, its numerator = x – 3 So, the original fraction is $\frac{x-3}{x}$ Given,</p> $\frac{(x-3)+2}{x+2} + \frac{(x-3)}{x} = \frac{29}{20}$ $\frac{(x-1)}{x+2} + \frac{(x-3)}{x} = \frac{29}{20}$ $\frac{(x-1)x + (x-3)(x+2)}{(x+2)x} = \frac{29}{20}$ $\frac{x^2 - x + x^2 - x - 6}{x^2 + 2x} = \frac{29}{20}$ $20(2x^2 - 2x - 6) = 29(x^2 + 2x)$ $11x^2 - 98x - 120 = 0$ $11x^2 - 110x + 12x - 120 = 0$ $11x(x - 10) + 12(x - 10) = 0$ $(11x + 12)(x - 10) = 0$ $x = 10 \text{ or } x = -\frac{12}{11} \text{ (not possible as it is not an integer)}$ $\therefore x = 10$ <p>Hence, the required fraction is $\frac{7}{10}$</p> <p style="text-align: center;">OR</p>	<p>1</p> <p>1</p> <p>$1\frac{1}{2}$</p> <p>1</p> <p>$\frac{1}{2}$</p>

33 (B)	<p>Let the original speed of the train be x km/hr Distance travelled be 300km \therefore Original time (t_o) = $\frac{300}{x}$ hr New speed of the train = $(x+5)$ km/hr \therefore New time (t_n) = $\frac{300}{x+5}$ hr</p> <p>Given,</p> $t_o - t_n = 2$ $\frac{300}{x} - \frac{300}{x+5} = 2$ $\frac{300(x+5) - 300(x)}{x(x+5)} = 2$ $\frac{1500}{x^2 + 5x} = 2$ $x^2 + 5x - 750 = 0$ $x^2 + 30x - 25x - 750 = 0$ $x(x+30) - 25(x+30) = 0$ $(x-25)(x+30) = 0$ $x = 25 \text{ or } x = -30 \text{ (not possible as speed cannot be negative)}$ $\therefore x = 25$ <p>Hence, the original speed of the train is 25km/hr</p>	<p>$\frac{1}{2}$</p> <p>$\frac{1}{2}$</p> <p>1</p> <p>$1\frac{1}{2}$</p> <p>1</p> <p>$\frac{1}{2}$</p>
34 (A)	<p>Let BA be the Chimney and CD be the tower.</p>  <p>In $\triangle CBD$, $\tan 30^\circ = \frac{40}{BC} \Rightarrow BC = 40\sqrt{3} \text{ m}$</p> <p>In $\triangle ABC$, $\tan 60^\circ = \frac{AB}{40\sqrt{3}} \Rightarrow AB = 120 \text{ m}$ $AE = (120 - 40) \text{ m} = 80 \text{ m}$, $ED = BC = 40\sqrt{3} \text{ m}$ Now, $AD = \sqrt{AE^2 + ED^2} = \sqrt{6400 + 4800} = 40\sqrt{7} \text{ m}$</p> <p>Thus, length of wire tied from the top of the chimney to the top of tower is $40\sqrt{7} \text{ m}$.</p> <p style="text-align: center;">OR</p>	<p>1 (for correct figure)</p> <p>$1\frac{1}{2}$</p> <p>$1\frac{1}{2}$</p> <p>1</p>

<p>34 (B)</p>	<p>Let EC be the tower and AB be the building.</p>  <p>In $\triangle EDA$, $\tan 45^\circ = \frac{h}{x} \Rightarrow h = x$</p> <p>In $\triangle EBC$, $\tan 60^\circ = \frac{EC}{BC} \Rightarrow h + 50 = \sqrt{3}h \Rightarrow h = \frac{50}{\sqrt{3}-1} = 25(\sqrt{3} + 1)m$</p> <p>Thus, $h = 68.25 m = x$ (Horizontal distance between the tower and building)</p> <p>Now, height of the tower = $68.25 + 50 = 118.25 m$</p>	<p>1 (for correct figure)</p> <p>1½</p> <p>1½</p> <p>½</p> <p>½</p>
<p>35.</p>	<p>Volume of toy = Vol_{Hemi-sphere} + Vol_{Cone}</p>  $= \frac{2}{3}\pi r^3 + \frac{1}{3}\pi r^2 h = \frac{1}{3}\pi r^2 (2r + h) = 25.12 \text{ cm}^3$ <p>Volume of circumscribing cylinder = $\pi r^2 H = 50.24 \text{ cm}^3$</p> <p>Now, difference in the volumes of circumscribing cylinder and the toy</p> $= \text{Vol. of cylinder} - \text{Vol. of toy}$ $= (50.24 - 25.12) \text{ cm}^3$ $= 25.12 \text{ cm}^3$ <p>Hence, difference in the volumes of circumscribing cylinder and the toy is 25.12 cm^3.</p>	<p>1 (for correct figure)</p> <p>2</p> <p>1</p> <p>1</p>

Section –E

[This section comprises solution of 3 case- study based questions of 4 marks each with three sub parts of 1, 1 and 2 marks each respectively]

36.	<p>(i) Distance between B and C = $4\sqrt{2}$ units</p> <p>(ii) Mid-point of the line joining the points B and C = (4, 4)</p> <p>(iii) (A) As, OA = $\sqrt{41}$ units, OB = $\sqrt{40}$ units, OC = $\sqrt{40}$ units So, society A is the farthest from the office.</p> <p style="text-align: center;">OR</p> <p>(iii) (B) As, AB = $\sqrt{13}$ units, AC = $\sqrt{5}$ units So, Society C is nearer to society A.</p>	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1½</p> <p style="text-align: center;">½</p> <p style="text-align: center;">1½</p> <p style="text-align: center;">½</p>
37.	<p>(i) Area of sector = $\frac{(\text{Arc length} \times \text{radius})}{2}$</p> <p>(ii) Area of sector = $\frac{80}{360} \pi \times 441 = 98\pi \text{ m}^2$</p> <p>(iii) (A) $\frac{80}{360} \pi \times 441 = \frac{\theta}{360} \pi \times 28^2$ $\theta = 45^\circ$</p> <p style="text-align: center;">OR</p> <p>(iii) (B) Increase in the area of the lawn watered = $\frac{80}{360} \pi \times (784 - 441)$ $= 239.56 \text{ m}^2$</p>	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p>
38.	<p>(i) $x = 100 - (30 - 32 - 24 - 4) = 10$</p> <p>(ii) P(selected person to have Rhesus negative blood type) = $\frac{10+8+6+1}{100}$ $= \frac{25}{100}$ or $\frac{1}{4}$</p> <p>(iii) (A) P(person is Rhesus positive but neither A nor B type blood) = $\frac{30+3}{100}$ $= \frac{33}{100}$</p> <p style="text-align: center;">OR</p> <p>(iii) (B) P(person is neither universal recipient nor universal donor) $= 1 - \frac{(3+10)}{100}$ $= 1 - \frac{13}{100}$ $= \frac{87}{100}$</p>	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1+1</p> <p style="text-align: center;">1½</p> <p style="text-align: center;">½</p>

MATHEMATICS STANDARD – Code No.041
SAMPLE QUESTION PAPER
CLASS – X (2025-26)

Maximum Marks: 80

Time: 3 hours


General Instructions:

Read the following instructions carefully and follow them:

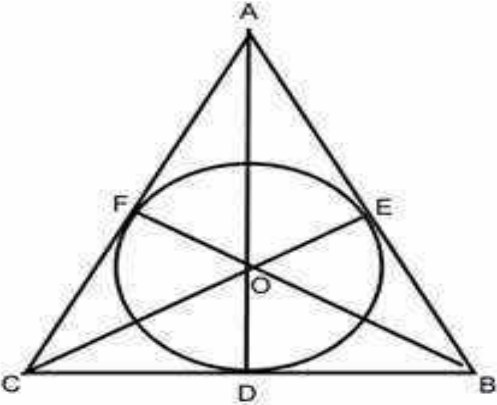
1. This question paper contains 38 questions. All Questions are compulsory.
2. This Question Paper is divided into 5 Sections A, B, C, D and E.
3. In Section A, Question numbers 1-18 are multiple choice questions (MCQs) and questions no. 19 and 20 are Assertion- Reason based questions of 1 mark each.
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 $\pi = \frac{22}{7}$ wherever required if not stated.
10. Use of calculators is not allowed.

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

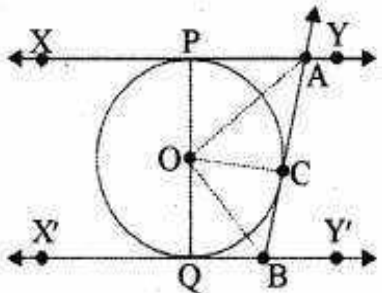
Q.No.	Questions	Marks
1.	If $a = 2^2 \times 3^x$, $b = 2^2 \times 3 \times 5$, $c = 2^2 \times 3 \times 7$ and $\text{LCM}(a, b, c) = 3780$, then x is equal to (A) 1 (B) 2 (C) 3 (D) 0	1
2.	The shortest distance (in units) of the point (2,3) from y-axis is (A) 2 (B) 3 (C) 5 (D) 1	1
3.	If the lines given by $3x + 2ky = 2$ and $2x + 5y + 1 = 0$ are not parallel, then k has to be (A) $\frac{15}{4}$ (B) $\neq \frac{15}{4}$ (C) any rational number (D) any rational number having 4 as denominator	1

4.	A quadrilateral ABCD is drawn to circumscribe a circle. If BC=7cm, CD=4cm and AD=3cm, then the length of AB is (A) 3cm (B) 4cm (C) 6cm (D) 7cm	1
5.	If $\sec\theta + \tan\theta = x$, then $\sec\theta - \tan\theta$ will be (A) x (B) x^2 (C) $\frac{2}{x}$ (D) $\frac{1}{x}$	1
6.	Which one of the following is not a quadratic equation? (A) $(x+2)^2 = 2(x+3)$ (B) $x^2 + 3x = (-1)(1-3x)^2$ (C) $x^3 - x^2 + 2x + 1 = (x+1)^3$ (D) $(x+2)(x+1) = x^2 + 2x + 3$	1
7.	<p>Given below is the picture of the Olympic rings made by taking five congruent circles of radius 1cm each, intersecting in such a way that the chord formed by joining the point of intersection of two circles is also of length 1cm. Total area of all the dotted regions (assuming the thickness of the rings to be negligible) is</p>  <p>(A) $4\left[\frac{\pi}{12} - \frac{\sqrt{3}}{4}\right] \text{ cm}^2$ (B) $\left[\frac{\pi}{6} - \frac{\sqrt{3}}{4}\right] \text{ cm}^2$ (C) $4\left[\frac{\pi}{6} - \frac{\sqrt{3}}{4}\right] \text{ cm}^2$ (D) $8\left[\frac{\pi}{6} - \frac{\sqrt{3}}{4}\right] \text{ cm}^2$</p> <p>For Visually Impaired candidates The area of the circle that can be inscribed in a square of 6 cm is (A) $36\pi \text{ cm}^2$ (B) $18\pi \text{ cm}^2$ (C) $12\pi \text{ cm}^2$ (D) $9\pi \text{ cm}^2$</p>	1
8.	A pair of dice is tossed. The probability of not getting the sum eight is (A) $\frac{5}{36}$ (B) $\frac{31}{36}$ (C) $\frac{5}{18}$ (D) $\frac{5}{9}$	1
9.	If $2\sin 5x = \sqrt{3}$, $0^\circ \leq x \leq 90^\circ$, then x is equal to (A) 10° (B) 12° (C) 20° (D) 50°	1
10.	The sum of two numbers is 1215 and their HCF is 81, then the possible pairs of such numbers are (A) 2 (B) 3 (C) 4 (D) 5	1

11.	If the area of the base of a right circular cone is 51cm^2 and it's volume is 85cm^3 , then the height of the cone is given as (A) $\frac{5}{6}\text{cm}$ (B) $\frac{5}{3}\text{cm}$ (C) $\frac{5}{2}\text{cm}$ (D) 5cm	1
12.	If zeroes of the quadratic polynomial $ax^2 + bx + c$ ($a, c \neq 0$) are equal, then (A) c and b must have opposite signs (B) c and a must have opposite signs (C) c and b must have same signs (D) c and a must have same signs	1
13.	The area (in cm^2) of a sector of a circle of radius 21cm cut off by an arc of length 22cm is (A) 441 (B) 321 (C) 231 (D) 221	1
14.	If $\triangle ABC \sim \triangle DEF$, $AB=6\text{cm}$, $DE=9\text{cm}$, $EF=6\text{cm}$ and $FD=12\text{cm}$, then the perimeter of $\triangle ABC$ is (A) 28cm (B) 28.5cm (C) 18cm (D) 23cm	1
15.	If the probability of the letter chosen at random from the letters of the word "Mathematics" to be a vowel is $\frac{2}{2x+1}$, then x is equal to (A) $\frac{4}{11}$ (B) $\frac{9}{4}$ (C) $\frac{11}{4}$ (D) $\frac{4}{9}$	1
16.	The points $A(9,0)$, $B(9, -6)$, $C(-9,0)$ and $D(-9,6)$ are the vertices of a (A) Square (B) Rectangle (C) Parallelogram (D) Trapezium	1
17.	The median of a set of 9 distinct observation is 20.5. If each of the observations of a set is increased by 2, then the median of a new set (A) is increased by 2 (B) is decreased by 2 (C) is two times the original number (D) Remains same as that of original observations	1
18.	The length of a tangent drawn to a circle of radius 9cm from a point at a distance of 41cm from the centre of the circle is (A) 40cm (B) 9cm (C) 41cm (D) 50cm	1
	<p>DIRECTIONS: In the question number 19 and 20, a statement of Assertion (A) is followed by a statement of Reason (R).</p> <p>Choose the correct option:</p> <p>(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 explanation of assertion (A) (C) Assertion (A) is true but reason (R) is false. (D) Assertion (A) is false but reason (R) is true.</p>	

19.	Assertion (A): The number 5^n cannot end with the digit 0, where n is a natural number Reason (R): A number ends with 0, if its prime factorization contains both 2 and 5	1
20.	Assertion (A): If $\cos A + \cos^2 A = 1$, then $\sin^2 A + \sin^4 A = 1$ Reason (R): $\sin^2 A + \cos^2 A = 1$	1
<p align="center">(Section – B)</p> <p align="center">Section B consists of 5 questions of 2 marks each.</p>		
21.(A)	The A.P 8, 10, 12,..... has 60 terms. Find the sum of last 10 terms.	2
(B)	<p align="center">OR</p> Find the middle term of A.P 6,13, 20,, 230	
22.	If $\sin(A + B) = 1$ and $\cos(A - B) = \frac{\sqrt{3}}{2}$, $0^\circ < A, B < 90^\circ$, find the measure of angles A and B .	2
23.	If AP and DQ are medians of triangles ABC and DEF respectively, where $\triangle ABC \sim \triangle DEF$, then prove that $\frac{AB}{DE} = \frac{AP}{DQ}$	2
24.(A)	A horse, a cow and a goat are tied, each by ropes of length 14m, at the corners A, B and C respectively, of a grassy triangular field ABC with sides of lengths 35m, 40m and 50 m. Find the area of grass field that can be grazed by them.	2
(B)	<p align="center">OR</p> Find the area of the major segment (in terms of π) of a circle of radius 5cm, formed by a chord subtending an angle of 90° at the centre.	
25.	<p>A $\triangle ABC$ is drawn to circumscribe a circle of radius 4 cm such that the segments BD and DC are of lengths 10 cm and 8 cm respectively. Find the lengths of the sides AB and AC, if it is given that $\text{ar}(\triangle ABC) = 90\text{cm}^2$</p>  <p>For Visually Impaired candidates:</p> <p>A circle is inscribed in a right-angled triangle ABC, right angled at B. If $BC=7\text{cm}$ and $AB=24\text{cm}$, find the radius of the circle</p>	2

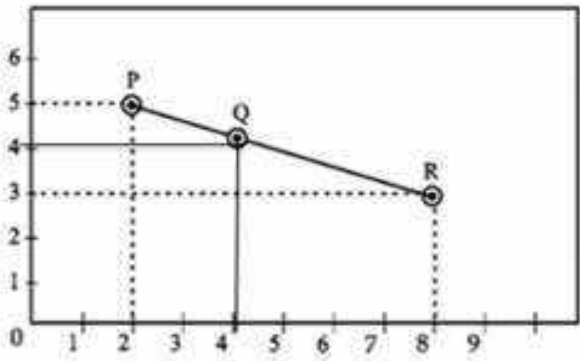
(Section – C)
Section C consists of 6 questions of 3 marks each.


<p>26.</p>	<p>In Figure, XY and X'Y' are two parallel tangents to a circle with centre O and another tangent AB with point of contact C intersecting XY at A and X'Y' at B. Prove that $\angle AOB = 90^\circ$</p>  <p>For Visually Impaired candidates:</p> <p>Two tangents PA and PB are drawn to a circle with centre O from an external point P. Prove that $\angle APB = 2(\angle OAB)$</p>	<p>3</p>
<p>27.</p>	<p>In a workshop, the number of teachers of English, Hindi and Science are 36, 60 and 84 respectively. Find the minimum number of rooms required, if in each room the same number of teachers are to be seated and all of them being of the same subject.</p>	<p>3</p>
<p>28.</p>	<p>Find the zeroes of the quadratic polynomial $2x^2 - (1 + 2\sqrt{2})x + \sqrt{2}$ and verify the relationship between the zeroes and coefficients of the polynomial.</p>	<p>3</p>
<p>29.</p>	<p>If $\sin\theta + \cos\theta = \sqrt{3}$, then prove that $\tan\theta + \cot\theta = 1$</p> <p style="text-align: center;">OR</p> <p>Prove that $\frac{\cos A - \sin A + 1}{\cos A + \sin A - 1} = \operatorname{cosec} A + \cot A$</p>	<p>3</p>
<p>30.</p>	<p>On a particular day, Vidhi and Unnati couldn't decide on who would get to drive the car. They had one coin each and flipped their coin exactly three times. The following was agreed upon:</p> <ol style="list-style-type: none"> 1. If Vidhi gets two heads in a row, she would drive the car 2. If Unnati gets a head immediately followed by a tail, she would drive the car. <p>Who has greater probability to drive the car that day? Justify your answer.</p>	<p>3</p>
<p>31.(A)</p> <p style="text-align: center;">OR</p> <p>(B)</p>	<p>The monthly income of Aryan and Babban are in the ratio 3:4 and their monthly expenditures are in ratio 5:7. If each saves ₹ 15,000 per month, find their monthly incomes.</p> <p>Solve the following system of equations graphically: $2x + y = 6$, $2x - y - 2 = 0$. Find the area of the triangle so formed by two lines and x - axis.</p> <p>For Visually Impaired candidates:</p> <p>Five years hence, fathers age will be three times the age of son. Five years ago, father was seven times as old as his son. Find their present ages.</p>	<p>3</p>

(Section – D)

Section D consists of 4 questions of 5 marks each

32.	A train travels at a certain average speed for a distance of 63km and then travels at a distance of 72km at an average speed of 6km/hr more than its original speed. If it takes 3 hours to complete the total journey, what is the original average speed?	5														
33.	<p>Prove that if a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.</p> <p>Hence in ΔPQR, prove that a line ℓ intersects the sides PQ and PR of a ΔPQR at L and M respectively such that $LM \parallel QR$. If $PL = 5.7\text{cm}$, $PQ=15.2\text{cm}$ and $MR=5.5\text{cm}$, then find the length of PM (in cm)</p>	5														
34.(A)	From a solid right circular cone, whose height is 6cm and radius of base is 12cm, a right circular cylindrical cavity of height 3cm and radius 4cm is hollowed out such that bases of cone and cylinder form concentric circles. Find the surface area of the remaining solid in terms of π .	5														
	OR															
(B)	An empty cone of radius 3cm and height 12cm is filled with ice-cream such that the lower part of the cone which is $(\frac{1}{6})^{\text{th}}$ of the volume of the cone is unfilled (empty) but a hemisphere is formed on the top. Find the volume of the ice-cream.															
35.(A)	<p>If the mode of the following distribution is 55, then find the value of x. Hence, find the mean.</p> <table><tr><td>Class Interval</td><td>0 – 15</td><td>15 – 30</td><td>30 – 45</td><td>45 – 60</td><td>60 – 75</td><td>75 – 90</td></tr><tr><td>Frequency</td><td>10</td><td>7</td><td>x</td><td>15</td><td>10</td><td>12</td></tr></table>	Class Interval	0 – 15	15 – 30	30 – 45	45 – 60	60 – 75	75 – 90	Frequency	10	7	x	15	10	12	5
Class Interval	0 – 15	15 – 30	30 – 45	45 – 60	60 – 75	75 – 90										
Frequency	10	7	x	15	10	12										
	OR															
(B)	<p>A survey regarding heights (in cm) of 51 girls of class X of a school was conducted and the following data was obtained:</p> <table><tr><th>Heights (in cm)</th><th>Number of girls</th></tr><tr><td>less than 140</td><td>04</td></tr><tr><td>less than 145</td><td>11</td></tr><tr><td>less than 150</td><td>29</td></tr><tr><td>less than 155</td><td>40</td></tr><tr><td>less than 160</td><td>46</td></tr><tr><td>less than 165</td><td>51</td></tr></table> <p>Find the median height of girls. If mode of the above distribution is 148.05, find the mean using empirical formula.</p>	Heights (in cm)	Number of girls	less than 140	04	less than 145	11	less than 150	29	less than 155	40	less than 160	46	less than 165	51	
Heights (in cm)	Number of girls															
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less than 150	29															
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less than 160	46															
less than 165	51															

<p align="center">(Section – E)</p> <p align="center">Section E consists of 3 case study-based questions of 4 marks each.</p>		
36.	<p>In a class, the teacher asks every student to write an example of A.P. Two boys Aryan and Roshan writes the progression as $-5, -2, 1, 4, \dots$ and $187, 184, 181, \dots$ respectively. Now the teacher asks his various students the following questions on progression.</p> <p>Help the students to find answers for the following:</p> <ol style="list-style-type: none"> Find the sum of the common difference of two progressions. Find the 34th term of progression written by Roshan. (A) Find the sum of first 10 terms of the progression written by Aryan. <p align="center">OR</p> <p>(B) Which term of the progressions will have the same value?</p>	<p align="right">1</p> <p align="right">1</p> <p align="right">2</p> <p align="right">2</p>
37.	<p>A group of class X students goes to picnic during winter holidays. The position of three friends Aman, Kirti and Chahat are shown by the points P, Q and R</p>  <ol style="list-style-type: none"> Find the distance between P and R. Is Q, the midpoint of PR? Justify by finding midpoint of PR. (A) Find the point on x-axis which is equidistant from P and Q. <p align="center">OR</p> <p>(B) Let S be a point which divides the line joining PQ in ratio 2:3. Find the coordinates of S.</p> <p>For Visually Impaired Candidates:</p> <p>A group of class X students goes to picnic during winter holidays. Aman, Kirti and Chahat are three friends. The position of three friends Aman, Kirti and Chahat are shown by the points P, Q and R.</p> <p>The co-ordinates of P (2,5), Q (4,4) and R (8,3) are given.</p> <ol style="list-style-type: none"> Find the distance between P and R. Is Q the midpoint of PR? Justify by finding midpoint of PR. (A) Find the point on x-axis which is equidistant from P and Q. <p align="center">OR</p> <p>(B) Let S be a point which divides the line joining PQ in ratio 2:3. Find the coordinates of S.</p>	<p align="right">1</p> <p align="right">1</p> <p align="right">2</p> <p align="right">2</p> <p align="right">1</p> <p align="right">1</p> <p align="right">2</p> <p align="right">2</p>


38.	<p>India gate (formerly known as All India war memorial) is located near Karthavya path. (formerly Rajpath) at New Delhi. It stands as a memorial to 74187 soldiers of Indian Army, who gave their life in the first world war. This 42m tall structure was designed by Sir Edwin Lutyens in the style of Roman triumphal arches. A student Shreya of height 1 m visited India Gate as a part of her study tour.</p>		
	<p>i. What is the angle of elevation from Shreya's eye to the top of India Gate, if she is standing at a distance of 41m away from the India Gate?</p> <p>ii. If Shreya observes the angle of elevation from her eye to the top of India Gate to be 60°, then how far is she standing from the base of the India Gate?</p> <p>iii. (A) If the angle of elevation from Shreya's eye changes from 45° to 30°, when she moves some distance back from the original position. Find the distance she moves back.</p>		<p>1</p> <p>1</p> <p>2</p>
	<p style="text-align: center;">OR</p> <p>(B) If Shreya moves to a point which is at a distance of $\frac{41}{\sqrt{3}}$ m from the India Gate, then find the angle of elevation made by her eye to the top of India Gate.</p>		<p>2</p>

*Please note that the assessment scheme of the Academic Session 2024-25 will continue in the current session i.e. 2025-26

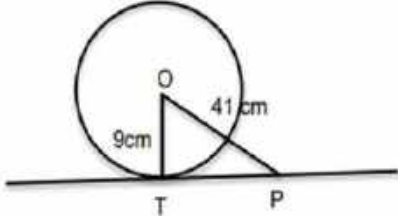
MATHEMATICS STANDARD – Code No.041
MARKING SCHEME
CLASS – X (2025-26)

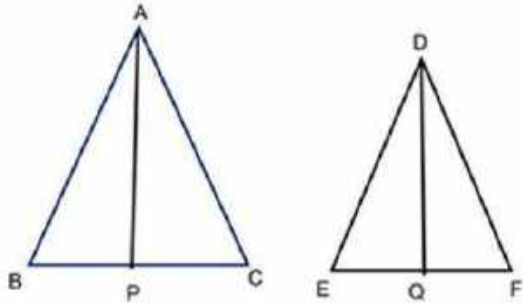
Maximum Marks: 80

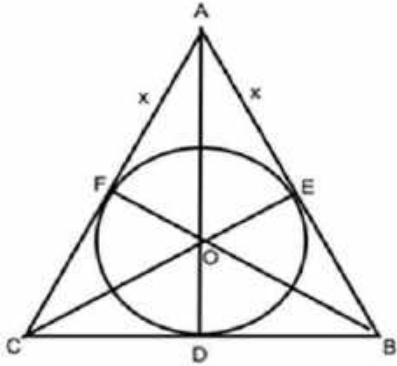
Time: 3 hours

Q.No.	Section A	Marks
1.	(C) 3 $LCM(a, b, c) = 2^2 \times 3^x \times 5 \times 7 = 3780$ $140 \times 3^x = 3780$ $3^x = 27 = 3^3$ $x = 3$	1
2.	(A) 2 As shortest distance from (2, 3) to y-axis is the x coordinate, i.e., 2.	1
3.	(B) $k \neq \frac{15}{4}$ $\frac{3}{2} \neq \frac{2k}{5}$, hence $k \neq \frac{15}{4}$	1
4.	(C) 6cm $AB + CD = AD + BC$ $AB + 4 = 3 + 7$ $AB = 6\text{cm}$	1
5.	(D) $\frac{1}{x}$ $\frac{1}{\sec\theta + \tan\theta} = \frac{(\sec\theta - \tan\theta)}{(\sec\theta + \tan\theta)(\sec\theta - \tan\theta)} = \frac{(\sec\theta - \tan\theta)}{1} = \sec\theta - \tan\theta$	1
6.	(D) $(x + 2)(x + 1) = x^2 + 2x + 3$, so, $x^2 + 3x + 2 = x^2 + 2x + 3$ gives $x - 1 = 0$ It's not a quadratic equation.	1
7.	D) $8\left[\frac{\pi}{6} - \frac{\sqrt{3}}{4}\right] \text{ cm}^2$  Required Area = $8 \times \text{area of one segment (with } r = 1\text{cm and } \theta = 60^\circ)$ $= 8 \times \left(\frac{60^\circ}{360^\circ} \times \pi \times 1^2 - \frac{\sqrt{3}}{4} \times 1^2 \right)$ $= 8\left[\frac{\pi}{6} - \frac{\sqrt{3}}{4}\right] \text{ cm}^2$	1

	For Visually Impaired candidates: (D) $9\pi\text{cm}^2$ area of circle $=\pi(3^2)$ $=9\pi\text{ cm}^2$	
8.	(B) $\frac{31}{36}$ Probability of getting sum 8 is $\frac{5}{36}$ Probability of not getting sum 8 is $\frac{31}{36}$	1
9.	(B) 12° $\sin 5x = \frac{\sqrt{3}}{2}$ So, $5x = 60^\circ$ And hence $x = 12^\circ$	1
10.	(C) 4 Since HCF=81, the numbers can be $81x$ and $81y$ $81x + 81y = 1215$ $x + y = 15$ which gives four pairs as (1,14), (2,13), (4,11), (7,8)	1
11.	(D) 5cm $\pi r^2 = 51$ $V = \frac{1}{3} \times \pi r^2 \times h$ $85 = \frac{1}{3} \times 51 \times h$ $h = \frac{85}{17} = 5\text{cm}$	1
12.	(D) As for equal roots to the corresponding equation, $b^2 = 4ac$ Hence $ac = \frac{b^2}{4}$ And hence $ac > 0 \Rightarrow c$ and a must have same signs	1
13.	(C) 231 Area of sector $= \frac{1}{2} \times l \times r$ $= \frac{1}{2} \times 22 \times 21 = 231\text{cm}^2$	1

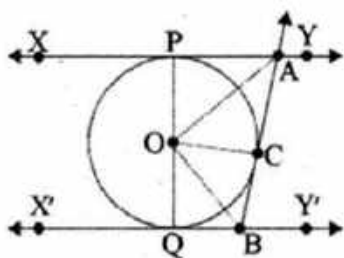
14.	<p>(C) 18cm</p> <p>$\triangle ABC \sim \triangle DEF$</p> <p>$\frac{AB}{DE} = \frac{BC}{EF} = \frac{AC}{DF} = \frac{\text{Perimeter of } \triangle ABC}{\text{Perimeter of } \triangle DEF}$</p> <p>$\frac{6}{9} = \frac{\text{Perimeter of } \triangle ABC}{27}$</p> <p>Perimeter of $\triangle ABC = 18\text{cm}$</p>	1
15.	<p>(B) $\frac{9}{4}$</p> <p>Probability of getting vowels in the word Mathematics is $\frac{4}{11}$,</p> <p>So, $\frac{2}{2x+1} = \frac{4}{11}$</p> <p>$\Rightarrow x = \frac{9}{4}$</p>	1
16.	<p>(C) Parallelogram</p> <p>By visualising the figure by plotting points in co-ordinate plane it can be concluded it is a Parallelogram.</p>	1
17.	<p>(A) median is increased by 2</p>	1
18.	<p>(A) 40cm</p>  <p>Since, tangent is perpendicular to the radius at the point of contact In $\triangle OPT$, right angled at T $OP^2 = OT^2 + TP^2$ $41^2 = 9^2 + TP^2$ $TP^2 = 1681 - 81 = 1600$ $TP = 40\text{cm}$</p>	1
19.	<p>(A) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)</p>	1
20.	<p>(A)</p> <p>$\cos A + \cos^2 A = 1$ -----(i)</p> <p>gives $\cos A = \sin^2 A$ -----(ii) (using $\sin^2 A + \cos^2 A = 1$)</p> <p>Substituting value of $\cos A$ from (ii) in (i)</p> <p>$\sin^2 A + \sin^4 A = 1$</p> <p>\therefore Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)</p>	1

(Section – B)		
21. (A)	$n = 60, a = 8 \text{ and } d = 2$ $t_{60} = 8 + 59(2) = 126$ $t_{51} = 108$ Hence $t_{51} + t_{52} + \dots + t_{60} = \frac{10}{2}(108 + 126) = 1170$	$\frac{1}{2}$ $\frac{1}{2}$ 1
(B)	<p style="text-align: center;">OR</p> $230 = 6 + (n - 1)7 \text{ gives } n = 33$ $\therefore \text{Middle Term} = t_{17} = 6 + (16)(7) = 118$	1 1
22.	$A + B = 90^\circ \text{ and } A - B = 30^\circ$ $A = 60^\circ \text{ and } B = 30^\circ$	1 1
23.	 <p>$\triangle ABC \sim \triangle DEF$</p> $\Rightarrow \frac{AB}{DE} = \frac{BC}{EF}$ $\frac{AB}{DE} = \frac{2B}{2EQ} \text{ (AP and DQ are the medians)}$ $\frac{AB}{DE} = \frac{BP}{EQ}$ <p>In $\triangle ABP$ and $\triangle DEQ$</p> $\frac{AB}{DE} = \frac{BP}{EQ}$ <p>$\angle B = \angle E$ ($\triangle ABC \sim \triangle DEF$)</p> $\Rightarrow \triangle ABP \sim \triangle DEQ$ <p>Hence, $\frac{AB}{DE} = \frac{AP}{DQ}$</p>	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$
24.(A)	<p>area of grass field that can be grazed by them</p> $= \frac{\theta_1}{360^\circ} \times \pi r^2 + \frac{\theta_2}{360^\circ} \times \pi r^2 + \frac{\theta_3}{360^\circ} \times \pi r^2$ $= \frac{\pi r^2}{360^\circ} (\theta_1 + \theta_2 + \theta_3)$ $= \frac{\pi r^2}{360^\circ} \times 180^\circ$ $= \frac{22}{7} \times \frac{14 \times 14}{2}$ $= 308 \text{ m}^2$	1 1

(B)	<p style="text-align: center;">OR</p> <p>Area of minor segment = Area of sector – area of triangle</p> $= \frac{90^\circ}{360^\circ} \pi r^2 - \frac{1}{2} \times r^2$ $= \left(\frac{25}{4} \pi - \frac{25}{2} \right) \text{ cm}^2$ <p>Area of major segment = Area of circle – Area of minor segment</p> $= \pi 5^2 - \left(\frac{25}{4} \pi - \frac{25}{2} \right)$ $= 25\pi - \frac{25}{4} \pi + \frac{25}{2}$ $= \left(\frac{75}{4} \pi + \frac{25}{2} \right) \text{ cm}^2$	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p>
25.	<div style="text-align: center;">  </div> <p>Let r be the radius of the inscribed circle</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> $\left. \begin{array}{l} BD=BE=10\text{cm} \\ CD=CF=8\text{cm} \\ \text{Let } AF=AE=x \end{array} \right\}$ </div> <div style="margin-right: 10px;"> $\left. \begin{array}{l} \text{ar}(\triangle ABC) = \text{ar}(\triangle AOC) + \text{ar}(\triangle BOC) + \text{ar}(\triangle AOB) \\ = \frac{1}{2} \times r \times AC + \frac{1}{2} \times r \times BC + \frac{1}{2} \times r \times AB \\ 90 = \frac{1}{2} \times 4 (x + 8 + 18 + x + 10) \\ x = 4.5\text{cm} \\ \therefore AB = 4.5 + 10 = 14.5\text{cm} \\ AC = 4.5 + 8 = 12.5\text{cm} \end{array} \right\}$ </div> </div> <p>For Visually Impaired candidates:</p> <p>$AC^2 = AB^2 + BC^2 = 24^2 + 7^2 = 625$ $AC = 25\text{cm}$</p> <p>Area of $\triangle ABC = \frac{1}{2} \times 7 \times 24 = 84\text{cm}^2$ -----(i)</p> <p>Let r = radius of circle</p> <p>Also, Area of $\triangle ABC = \frac{1}{2} (24r + 25r + 7r)$ $= \frac{1}{2} \times 56 r$ -----(ii)</p> <p>From (i) and (ii), we get $r = 3\text{cm}$</p>	<p style="text-align: center;">$\frac{1}{2}$</p> <p style="text-align: center;">$\frac{1}{2}$</p> <p style="text-align: center;">$\frac{1}{2}$</p> <p style="text-align: center;">$\frac{1}{2}$</p> <p style="text-align: center;">$\frac{1}{2}$</p> <p style="text-align: center;">$\frac{1}{2}$</p> <p style="text-align: center;">$\frac{1}{2}$</p> <p style="text-align: center;">$\frac{1}{2}$</p>

(Section – C)

26.



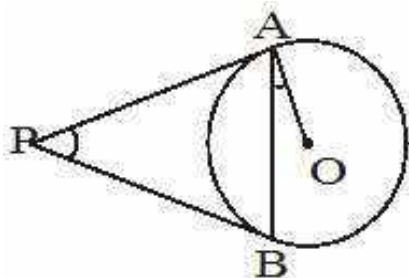
In $\triangle APO$ and $\triangle ACO$
 $AP=AC$ (Tangents from External Point)
 $AO=AO$ (common)
 $OP=OC$ (radii)
 $\triangle APO \cong \triangle ACO$
 $\angle POQ=180^\circ$ (PQ is the diameter)
 $\angle POA + \angle COA + \angle QOB + \angle COB = 180^\circ$
 $2\angle COA + 2\angle COB = 180^\circ$
 $\angle AOB = 90^\circ$

1

1

1

For Visually Impaired candidates:



PA=PB (Tangents from external point to a circle)

$\angle PAB = \angle PBA = x$ (angles opposite to equal sides)

In $\triangle PAB$, $\angle PAB + \angle PBA + \angle APB = 180^\circ$

$$x + x + \angle APB = 180^\circ$$

$$\angle APB = 180^\circ - 2x \text{ -----(i)}$$

Also,

$\angle PAB + \angle OAB = 90^\circ$ (radius is perpendicular to the tangent at the point of contact)

$$x + \angle OAB = 90^\circ$$

$$x = 90^\circ - \angle OAB \quad \text{----- (ii)}$$

Substituting (ii) in (i), we get

$$\angle APB = 180^\circ - 2(90^\circ - \angle OAB)$$

$$\angle APB = 2\angle OAB$$

 $\frac{1}{2}$

1

1

 $\frac{1}{2}$

27.

$$\text{HCF}(36, 60, 84) = 12$$

$$\begin{aligned}\text{Required number of rooms} &= \frac{36}{12} + \frac{60}{12} + \frac{84}{12} \\ &= 3 + 5 + 7 \\ &= 15\end{aligned}$$

1 1/2

1

 $\frac{1}{2}$

28.

$$2x^2 - (1+2\sqrt{2})x + \sqrt{2}$$

$$= 2x^2 - x - 2\sqrt{2}x + \sqrt{2}$$

$$= (2x - 1)(x - \sqrt{2})$$
 Hence the zeroes are $\frac{1}{2}$ and $\sqrt{2}$.

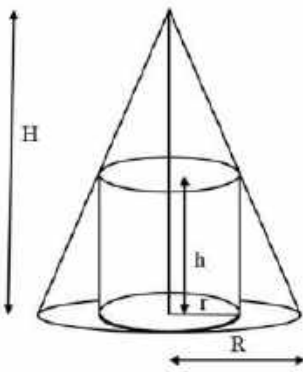
Now $\frac{-b}{a} = \frac{2\sqrt{2}+1}{2} = \sqrt{2} + \frac{1}{2}$ and $\frac{c}{a} = \frac{\sqrt{2}}{2} = \frac{1}{2} \times \sqrt{2}$

1

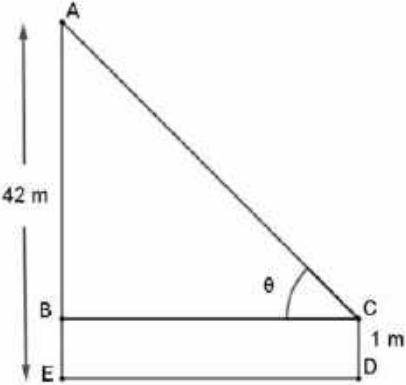
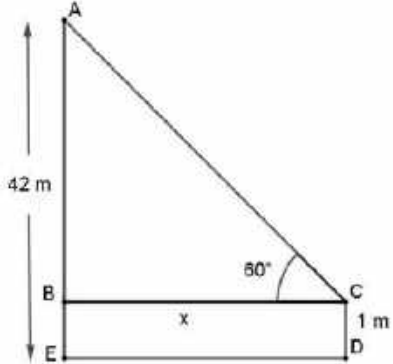
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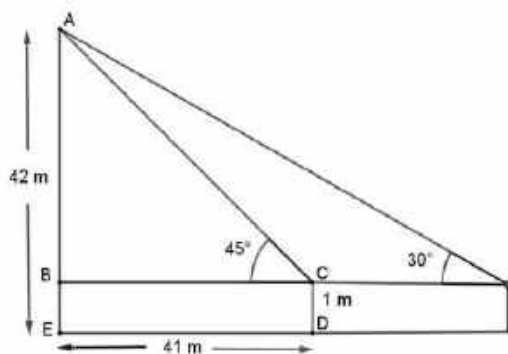
1

	<p>Hence, the solution is $x = 2, y = 2$</p> <p>Area= 2 sq. units</p> <p>For Visually Impaired candidates</p> <p>Let the present age of father be x and son be y So, $(x + 5) = 3(y + 5) \Rightarrow x - 3y = 10$ $x - 5 = 7(y - 5) \Rightarrow x - 7y = -30$ So, $x = 40, y = 10$. Hence the present ages of father and son are 40 years and 10 years Respectively</p>	<p>$\frac{1}{2}$</p> <p>$\frac{1}{2}$</p> <p>1 1 1</p>
Section D		
32.	<p>Let the original speed of train be x km/hr Distance = 63km, time(t_1) = $\frac{63}{x}$ hrs Faster speed = $(x + 6)$ km/hr time (t_2) = $\frac{72}{x+6}$ hrs Now $t_1 + t_2 = 3$ hrs</p> <p>So $\frac{63}{x} + \frac{72}{x+6} = 3$</p> <p>$63(x + 6) + 72x = 3(x + 6)x$ $135x + 378 = 3x^2 + 18x$ $3x^2 - 117x - 378 = 0$ $x^2 - 39x - 126 = 0$ $x^2 - 42x + 3x - 126 = 0$ gives $(x + 3)(x - 42) = 0$ As x can't be negative, so $x = 42$ km/hr</p> <p>The original speed of train = 42 km/hr</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>
33.	<p>Correct given, figure and construction Correct Proof since LM is parallel to QR Let PM = x $\frac{PL}{PQ} = \frac{PM}{PR}$ $\frac{5.7}{15.2} = \frac{x}{x+5.5}$ $x = PM = 3.3$cm</p>	<p>2 2</p> <p>$\frac{1}{2}$</p> <p>$\frac{1}{2}$</p>

34.	<p>(A)</p>  <p>Slant height of the cone $L = \sqrt{R^2 + H^2} = \sqrt{12^2 + 6^2}$ $= 3\sqrt{20} \text{ cm}$</p> <p>Curved Surface area of cone $= \pi RL = \pi \times 12 \times 3\sqrt{20}$ $= (36\sqrt{20}) \pi \text{ cm}^2$</p> <p>Area of base circle of cone (= area of outer circle - area of inner circle + top circular area of cylinder) $= \pi R^2 = \pi \times (12)^2$ $= 144\pi \text{ cm}^2$</p> <p>Curved Surface area of cylinder $= 2\pi rh = 2\pi \times 4 \times 3$ $= 24 \pi \text{ cm}^2$</p> <p>Surface area of the remaining solid= Curved surface of cone + area of base circle of cone + curved surface area of cylinder $= (36\sqrt{20})\pi + 144\pi + 24\pi$ $= (168 + 36\sqrt{20})\pi \text{ cm}^2$</p> <p>OR</p> <p>(B) Volume of cone $= \frac{1}{3}\pi r^2 h = \frac{1}{3}\pi \times 3 \times 3 \times 12 = 36\pi \text{ cm}^3$</p> <p>Volume of ice-cream in the cone $= \frac{5}{6} \times 36\pi \text{ cm}^3 = 30\pi \text{ cm}^3$</p> <p>Volume of ice-cream in the hemispherical part $= \frac{2}{3}\pi r^3 = \frac{2}{3}\pi \times 3 \times 3 \times 3 = 18\pi \text{ cm}^3$</p> <p>Total volume of the ice-cream $= (30\pi + 18\pi) = 48\pi = 150.86 \text{ cm}^3$ (approx.)</p>	<p>$\frac{1}{2}$</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>$\frac{1}{2}$</p> <p>2</p> <p>$1\frac{1}{2}$</p> <p>$1\frac{1}{2}$</p>																																
35.	<p>(A) Mode of the frequency distribution = 55 Modal class is 45-60. Lower limit is 45 Class Interval (h) = 15</p> <p>Now, Mode $= l + \left(\frac{f_1 - f_0}{2f_1 - f_0 - f_2} \right) \times h$</p> <p>$55 = 45 + \frac{15 - x}{30 - x} \times 5$</p> <p>So, $x = 5$</p> <table border="1"><thead><tr><th>CI</th><th>f_i</th><th>x_i</th><th>$f_i x_i$</th></tr></thead><tbody><tr><td>0-15</td><td>10</td><td>7.5</td><td>75</td></tr><tr><td>15-30</td><td>7</td><td>22.5</td><td>157.5</td></tr><tr><td>30-45</td><td>5</td><td>37.5</td><td>187.5</td></tr><tr><td>45-60</td><td>15</td><td>52.5</td><td>787.5</td></tr><tr><td>60-75</td><td>10</td><td>67.5</td><td>675</td></tr><tr><td>75-90</td><td>12</td><td>82.5</td><td>990</td></tr><tr><td></td><td>59</td><td></td><td>2872.5</td></tr></tbody></table> <p>Mean $= \bar{x} = \frac{2872.5}{59} = 48.68$</p>	CI	f_i	x_i	$f_i x_i$	0-15	10	7.5	75	15-30	7	22.5	157.5	30-45	5	37.5	187.5	45-60	15	52.5	787.5	60-75	10	67.5	675	75-90	12	82.5	990		59		2872.5	<p>$\frac{1}{2}$</p> <p>1</p> <p>1</p> <p>$1\frac{1}{2}$</p> <p>1</p>
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	<div>OR</div> <div>(B)</div> <table><thead><tr><th>Height (in cm)</th><th>Number of girls</th><th>Class Interval</th><th>frequency</th></tr></thead><tbody><tr><td>less than 140</td><td>04</td><td>135-140</td><td>4</td></tr><tr><td>less than 145</td><td>11</td><td>140-145</td><td>7</td></tr><tr><td>less than 150</td><td>29</td><td>145-150</td><td>18</td></tr><tr><td>less than 155</td><td>40</td><td>150-155</td><td>11</td></tr><tr><td>less than 160</td><td>46</td><td>155-160</td><td>6</td></tr><tr><td>less than 165</td><td>51</td><td>160-165</td><td>5</td></tr></tbody></table> <div>Median = $l + \left(\frac{\frac{N}{2} - cf}{f}\right) \times h$ = $145 + \left(\frac{\frac{51}{2} - 11}{18}\right) \times 5$ = 149.03 Median height = 149.03cm $3 \times \text{Median} = \text{Mode} + 2 \times \text{Mean}$ $3 \times 149.03 = 148.05 + 2 \times \text{Mean}$ Mean = 149.52</div>	Height (in cm)	Number of girls	Class Interval	frequency	less than 140	04	135-140	4	less than 145	11	140-145	7	less than 150	29	145-150	18	less than 155	40	150-155	11	less than 160	46	155-160	6	less than 165	51	160-165	5	1 <
Height (in cm)	Number of girls	Class Interval	frequency																											
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less than 165	51	160-165	5																											

<p>37.</p>	<p>(i) $PR = \sqrt{(8-2)^2 + (3-5)^2} = 2\sqrt{10}$</p> <p>(ii) Co-ordinates of Q (4,4). The mid-point of PR is (5,4) \therefore Q is not the mid-point of PR</p> <p>(iii) (A) Let the point be (x,0) $\text{So, } \sqrt{(2-x)^2 + 25} = \sqrt{(4-x)^2 + 16}$ $\text{Hence } x = \frac{3}{4}. \text{ Therefore the point is } \left(\frac{3}{4}, 0\right).$ <p style="text-align: center;">OR</p> (B) The coordinates of S will be $\left(\frac{2 \times 4 + 3 \times 2}{2+3}, \frac{2 \times 4 + 3 \times 5}{2+3}\right)$ $= \left(\frac{14}{5}, \frac{23}{5}\right)$</p>	<p>1</p> <p>$\frac{1}{2}$ $\frac{1}{2}$</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>
<p>38.</p>	<div style="display: flex; flex-direction: column; align-items: flex-start;"> <div style="margin-bottom: 20px;">  </div> <div>  </div> </div> <div style="margin-top: 20px;"> <p>(i) Distance from India gate = 41m, Height of monument = 42m, Shreya's height = 1m So, $\tan \theta = \frac{41}{41} = 1$ Angle of elevation = $\theta = 45^\circ$.</p> </div> <div style="margin-top: 20px;"> <p>(ii) Angle of elevation = 60° Perpendicular = 41m Let the distance from the India Gate be x m Hence $\tan 60^\circ = \frac{41}{x}$ $\Rightarrow x = \frac{41}{\sqrt{3}}$ \therefore Shreya is standing at a distance of $\frac{41\sqrt{3}}{3}$ m</p> </div>	<p>$\frac{1}{2}$ $\frac{1}{2}$</p> <p>$\frac{1}{2}$ $\frac{1}{2}$</p>



(iii) (A)

Distance from the India Gate = 41 m

Let the distance moved back be x m

$$\text{Then, } \tan 30^\circ = \frac{41}{41+x}$$

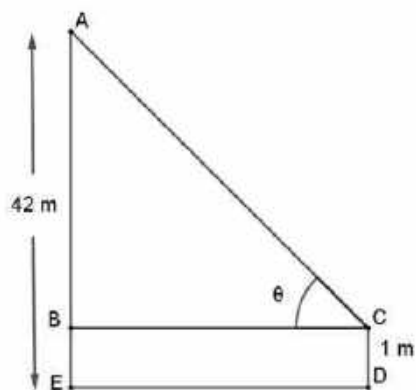
$$x = (41\sqrt{3} - 41) \text{ m} = 41(\sqrt{3} - 1) \text{ m}$$

$$\therefore \text{The distance moved back} = 41(\sqrt{3} - 1) \text{ m}$$

1

1

OR



(B) Let the angle of elevation of be θ

$$\text{Now, } \tan \theta = \frac{41}{\frac{41}{\sqrt{3}}} = \sqrt{3}$$

$$\text{This gives } \theta = 60^\circ$$

1

1

संस्कृतम् (सम्प्रेषणात्मकम्, कोड-सङ्ख्या - 119)

आदर्श-प्रश्नपत्रम् *

कक्षा - दशमी (2025-26)

अवधि: - होरात्रयम्

पूर्णाङ्काः - 80

सामान्यनिर्देशाः -

1. कृपया सम्यक्तया परीक्षणं कुर्वन्तु यत् अस्मिन् प्रश्नपत्रे 10 पृष्ठानि मुद्रितानि सन्ति ।
2. कृपया सम्यक्तया परीक्षणं कुर्वन्तु यत् अस्मिन् प्रश्नपत्रे 18 प्रश्नाः सन्ति ।
3. अस्मिन् प्रश्नपत्रे चत्वारः भागाः सन्ति-

‘क’ भागः	:	अपठितावबोधनम्	10 अङ्काः
‘ख’ भागः	:	रचनात्मककार्यम्	15 अङ्काः
‘ग’ भागः	:	अनुप्रयुक्तव्याकरणम्	25 अङ्काः
‘घ’ भागः	:	पठितावबोधनम्	30 अङ्काः
4. प्रत्येकं भागम् अधिकृत्य उत्तराणि एकस्मिन् स्थाने क्रमेण लेखनीयानि ।
5. उत्तरलेखनात् पूर्वं प्रश्नस्य क्रमाङ्कः अवश्यं लेखनीयः ।
6. प्रश्नस्य क्रमाङ्कः प्रश्नपत्रानुसारम् एव लेखनीयः ।
7. सर्वेषां प्रश्नानाम् उत्तराणि संस्कृतेन लेखनीयानि ।
8. प्रश्नानां निर्देशाः ध्यानेन अवश्यं पठनीयाः ।

‘क’ भागः


अपठितावबोधनम्

(10 अङ्काः)

- | | | |
|----|--|----|
| 1. | <p>अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत -</p> <p>अयं संसारः जनानां कर्मभूमिः अस्ति । अस्मिन् संसारे यावन्तः जनाः जन्म गृह्णन्ति, तेषां पृथक् पृथक् कर्तव्यानि भवन्ति । एतानि कर्तव्यानि अनेकविधानि भवन्ति । कानिचिद् व्यक्तिगतानि कानिचित् पारिवारिकाणि, कानिचित् सामाजिकानि । कानिचित् नित्यानि भवन्ति कानिचित् च नैमित्तिकानि । एतेषां सर्वेषां कर्तव्यानां पालनं मनुष्यस्य व्यक्तिगतहिताय देशहिताय च परमावश्यकं भवति । परमद्य जनेषु कर्तव्यपालनं प्रति न कापि निष्ठा । कोऽपि श्रमेण सत्यतया निष्ठया च कार्यं कर्तुं न वाञ्छति । अल्पेन एव प्रयासेन ते कार्यसिद्धिम् इच्छन्ति । ते केवलं स्वार्थपूर्तिं कर्तुम् इच्छन्ति । अधिकाराय तु सर्वे प्रयतन्ते परं कर्तव्यं प्रति कोऽपि ध्यानं न ददाति । सत्यमेतद् यावद् वयं परिश्रमपूर्वकं श्रद्धापूर्वकं च स्वकर्तव्यानि न पालयामः तावद् देशस्य समाजस्य च उन्नतिः भवितुं न अर्हति । कर्तव्यपालनम् एव आत्मना देशस्य च उन्नतेः मूलमन्त्रोऽस्ति ।</p> <p>अ. एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)</p> | 10 |
|----|--|----|

2×1=2

	<p>(i) अयं संसारः केषां कर्मभूमिः अस्ति?</p> <p>(ii) उन्नतेः मूलमन्त्रं किम् अस्ति?</p> <p>(iii) जनाः किं विहाय केवलम् अधिकाराय प्रयतन्ते?</p> <p>आ. पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) देशस्य उन्नतिः कदा भवितुम् अर्हति?</p> <p>(ii) कर्तव्यपालनं किमर्थम् आवश्यकम्?</p> <p>(iii) अद्यत्वे जनाः कथं कार्यसिद्धिम् इच्छन्ति?</p> <p>इ. अस्य अनुच्छेदस्य कृते उपयुक्तं शीर्षकं संस्कृतेन लिखत ।</p> <p>ई. यथानिर्देशम् उत्तरत -</p> <p>(i) 'अयं संसारः कर्मभूमिः अस्ति ।' अस्मिन् वाक्ये क्रियापदं किम्?</p> <p>(क) अयम् (ख) संसारः</p> <p>(ग) कर्मभूमिः (घ) अस्ति</p> <p>(ii) 'प्रयत्नं कुर्वन्ति' एतदर्थं किं क्रियापदं गद्यांशे प्रयुक्तम्?</p> <p>(क) प्रयतन्ते (ख) अर्हति</p> <p>(ग) इच्छन्ति (घ) भवन्ति</p> <p>(iii) 'प्रयासेन' इति पदस्य किं विशेषणपदं गद्यांशे प्रयुक्तम्?</p> <p>(क) निष्ठा (ख) अल्पेन</p> <p>(ग) सत्यता (घ) श्रमेण</p>	<p>2×2=4</p> <p>1</p> <p>3×1=3</p>
<p style="text-align: center;">‘ख’ भागः</p> <p style="text-align: center;">रचनात्मकं कार्यम् (15 अङ्काः)</p>		
2.	<p>भवत्याः नाम शर्वाणी । भवत्याः सखी प्रज्ज्वला संस्कृतं पठितुं भवत्याः परामर्शं वाञ्छति । तां प्रेरयितुं लिखितं पत्रं मञ्जूषायां प्रदत्तपदानां सहायतया पूरयित्वा पत्रम् उत्तरपुस्तिकायां लिखतु -</p> <p>डी-401, जनकपुरी</p> <p>(i) -----</p> <p>दिनाङ्कः -----</p> <p>प्रिय (ii) -----</p> <p>सस्नेहं नमस्ते ।</p> <p>अत्र कुशलं तत्रास्तु । आशासे त्वम् अपि कुशलिनी स्यात् । भवत्याः पत्रं प्राप्तम् । भवती संस्कृतभाषां पठितुम् इच्छति (iii) ----- पठित्वा मम प्रसन्नतायाः सीमा नास्ति । एषा भाषा सर्वाधिका (iv) ----- अस्ति । संस्कृतम् अस्माकं देशस्य प्रतिष्ठा वर्तते । वेदाः, उपनिषदः, रामायणं, महाभारतं, पुराणानि, महाकाव्यानि, कथासाहित्यम् इत्यादिकं सर्वं (v) ----- अत्यन्तं मार्गदर्शकं, ज्ञानवर्धकं प्रेरणाप्रदं च अस्ति । यथा पुष्पेभ्यः सुगन्धः पृथक् कर्तुं न शक्यते तथैव भारतीयसंस्कृतेः संस्कृतभाषां पृथक् (vi) ----- न शक्यते । संस्कृतेन सम्भाषणम् अस्माकं हृदयेषु (vii) ----- वर्धयति हीनभावनां च नाशयति । अतः त्वम् अवश्यं</p>	10×½=5

	<p>(viii) ----- पठ, पठित्वा च अस्याः भाषायाः (ix) ----- कुरु । एवं वयं भारतमातुः सेवां कृत्वा धन्याः भवामः । सर्वेभ्यः अग्रजेभ्यः मम प्रणामाः अनुजेभ्यः च आशीर्वादाः । भवत्याः सखी, (x) -----</p> <p style="text-align: center;">मञ्जूषा</p> <div style="border: 1px solid black; padding: 5px;">वैज्ञानिकी, प्रचारम्, वाङ्मयम्, प्रज्ज्वले, कर्तुम्, शर्वाणी, इति, गौरवम्, संस्कृतम्, नवदिल्लीतः ।</div>	
3. अ	<p>प्रदत्तं चित्रं दृष्ट्वा मञ्जूषायां प्रदत्तशब्दानां सहायतया पञ्च वाक्यानि संस्कृतेन लिखत -</p>  <p style="text-align: center;">मञ्जूषा</p> <div style="border: 1px solid black; padding: 10px; text-align: center;">निर्वाचनम्, मतदानकेन्द्रम्, पङ्क्तिबद्धाः, महिलाः, ग्रामीणाः, हस्तेषु परिचयपत्राणि, अधिकारः, जनप्रतिनिधिः, वृक्षाः, प्रतीक्षां कुर्वन्ति ।</div> <p style="text-align: center;">अथवा</p> <p>आ मञ्जूषाप्रदत्तशब्दानां साहाय्येन निम्नलिखितं विषयम् अधिकृत्य पञ्चभिः संस्कृतवाक्यैः एकम् अनुच्छेदं लिखत -</p> <p style="text-align: center;">“बालश्रमः”</p> <div style="border: 1px solid black; padding: 10px; text-align: center;">जलपानगृहेषु, भोजनालयेषु, उद्योगेषु, बालकाः, शिक्षातः, क्रीडनात्, वञ्चिताः, जनाः, ग्रामेभ्यः, आगच्छन्ति, अपि, धनप्राप्त्यर्थम्, कुर्वन्ति, संविधानम्, नियमः ।</div>	5×1=5
4. अ	<p>मञ्जूषाप्रदत्तपदैः रिक्तस्थानानि पूरयित्वा अधोलिखितसंवादं पुनः लिखत-</p> <p>छात्राः - (i) -----</p> <p>आचार्यः - स्वस्ति, यशस्विनः भवत ।</p> <p>आरुषः - मया श्रुतं यत् श्वः आरभ्य सद्यस्कमाध्यमेन (ऑनलाइन) कक्षा भविष्यति, किमर्थम्?</p> <p>आचार्यः - (ii) -----</p>	5×1=5

मोहितः - अस्माकं कक्षाध्यापिका चर्चायां सामान्यरूपेण अकथयत् यत् कदाचित् श्वः आरभ्यः
गृहात् एव कक्षा स्वीकरणीया भवेत् इति ।

आचार्यः - भवतां कक्षाध्यापिका सम्यक् सूचितवती । ह्यः वायुगुणवत्ता-सूचकाङ्कः महतीं वृद्धिं
प्राप्नोत् तस्मात् सर्वकारः जनानां स्वास्थ्यरक्षणाय सद्यस्कमाध्यमेन गृहात् एव पठितुं
कार्यं कर्तुं च निर्देशम् अयच्छत् ।

नव्या - (iii) -----

आचार्यः - सत्यं कथयति, वयं शिक्षकाः अपि साक्षात् कक्षायाम् आगत्य पाठयितुम् इच्छामः ।

भूमिका - (iv) -----

आचार्यः - इदानीं तु ईश्वरः एव जानीयात् । यदा प्रदूषणस्य निवारणाय प्रकृतेः च संरक्षणाय वयं
जागरूकाः भविष्यामः तदा एव अग्रे एतादृशी विकटा स्थितिः नैव आगमिष्यति ।

छात्राः - वयं प्रणं कुर्मः यत् वयं पर्यावरण-रक्षणाय निरन्तरं प्रयासरताः भविष्यामः ।

आचार्यः - (v) -----

मञ्जूषा

- (i) महोदय! गृहे मनः न रमते, अत्रैव वयं पठने आनन्दम् अनुभवामः ।
- (ii) सत्यं, तदैव इयं वसुन्धरा सुरक्षिता भविष्यति ।
- (iii) भवन्तं कः असूचयत्?
- (iv) आचार्य! प्रणमामः ।
- (v) पुनः कदा विद्यालये एव कक्षा भविष्यति?

अथवा

आ मञ्जूषायाः सहायतया अधोलिखितां कथां पूरयित्वा पुनः लिखत-

10×½=5

एकः मृत्तिका-घटः आसीत् । (i) ----- उपरि स्थितः शरावः यः घटस्य मुखम् आच्छादयति
सः एकदा घटम् अपृच्छत् - मित्र घट! मम (ii) ----- एकः प्रश्नः अस्ति । इदानीं
(iii) ----- अस्ति । यत् किमपि पात्रं यदा भवतः समीपम् आगच्छति तदा भवान् तत्पात्रं
(iv) ----- जलेन परिपूरयति । तानि सर्वाणि पात्राणि जलं स्वीकृत्य तृप्तानि भवन्ति । भवन्तम्
एकाकिनं विहाय दूरं गच्छन्ति । (v) ----- स्वार्थपरायणानि सन्ति, तथापि भवान् तेभ्यः
शीतलं जलं प्रदाय तेषु (vi) ----- करोति । अहं सर्वदा भवता सह एव तिष्ठामि कदापि भवन्तं
(vii) ----- कुत्रापि न गच्छामि परन्तु भवान् मह्यं कदापि बिन्दुमितम् अपि जलं न यच्छति,
किमर्थम्? तदा स्मितं कुर्वन् घटः (viii) ----- अवदत् - एतस्य कारणं भवतः प्रकृतिः
अस्ति । तानि सर्वाणि पात्राणि शिरः अवनम्य जलं याचन्ते अहञ्च तेषाम् इच्छां पूरयामि परं भवान्
तु सर्वदा मम (ix) ----- एव तिष्ठति तर्हि कथम् अहं भवते जलं दद्याम्? भवान् अपि शिरः
अवनम्य (x) ----- याचनां करोतु अहं भवन्तम् अपि निराशं न करिष्यामि ।

मञ्जूषा

	त्यक्त्वा, घर्मकालः, शिरसि, शीतलेन, मनसि, अनुग्रहम्, घटस्य, मन्दस्वरेण, तानि, जलार्थम्।	
<p style="text-align: center;">‘ग’ भागः</p> <p style="text-align: center;">अनुप्रयुक्तव्याकरणम् (25 अङ्काः)</p>		
5. अ	<p>अधोलिखितवाक्येषु रेखाङ्कितपदेषु सन्धिं सन्धिच्छेदं वा कुरुत-</p> <p>(i) स्वाध्यायाभ्यसनं चैव वाङ्मयं <u>तपः + उच्यते</u>।</p> <p>(ii) राज्ञः स्वस्य <u>गात्रेष्वपि</u> निरासक्तिं विज्ञाय सकलं ब्रह्माण्डं व्याकुलं सज्जातम्।</p> <p>(iii) मधुमासे कोकिलः <u>पं + चम</u> -स्वरेण गायति।</p> <p>(iv) विषयान् ध्यायतः पुंसः <u>सङ्गस्तेषु</u> उपजायते।</p> <p style="text-align: center;">अथवा</p> <p>आ अधोलिखितवाक्येषु रेखाङ्कितपदेषु सन्धिं सन्धिच्छेदं वा कुरुत-</p> <p>(i) तेषु <u>केचित् + दग्धाः</u>, केचिद् अर्धदग्धाः केचन च पञ्चत्वं गताः।</p> <p>(ii) अये कथं श्रीकृष्णार्जुनौ <u>युधिष्ठिरश्च</u>?</p> <p>(iii) मनसः निग्रहम् अहं <u>वायोः + इव</u> सुदुष्करं मन्ये।</p> <p>(iv) सुस्वागतं भोः <u>अरुणाचलेऽस्मिन्</u>।</p>	4×1=4
6.	<p>अधोलिखितवाक्येषु रेखाङ्कितपदानां समस्तपदं विग्रहं वा प्रदत्तविकल्पेभ्यः चित्वा लिखत -</p> <p>(i) पञ्चशतानां बौधभिक्षूणां <u>निवासयोग्या</u> स्थली इयम्।</p> <p>(क) निवासं योग्या (ख) निवासस्य योग्या</p> <p>(ग) निवासेन योग्या (घ) निवासाय योग्या</p> <p>(ii) कलशपातशब्देन प्रबुद्धौ तौ <u>जाया च पतिः च</u> आश्चर्यचकितौ आस्ताम्।</p> <p>(क) जायापती (ख) जायापतिः</p> <p>(ग) दम्पती (घ) दम्पतिः</p> <p>(iii) प्रकृतिमाता <u>सस्नेहं</u> सर्वान् बोधयति।</p> <p>(क) स्नेहम् अनतिक्रम्य (ख) स्नेहेन सहितम्</p> <p>(ग) स्नेहस्य अभावः (घ) स्नेहस्य योग्यम्</p> <p>(iv) पितुः उपदेशेन <u>न सन्तुष्टः</u> सः एकदा द्वारिकापुरीम् आगच्छत्।</p> <p>(क) असन्तुष्टः (ख) अनुसन्तुष्टः</p> <p>(ग) सन्तोषसहितः (घ) नसन्तुष्टः</p>	4×1=4
7.	<p>अधोलिखितवाक्येषु रेखाङ्कितपदानां प्रकृति-प्रत्ययौ संयोज्य विभज्य वा उचितम् उत्तरं विकल्पेभ्यः चित्वा लिखत -</p> <p>(i) भवतः <u>दानवीर + तल्</u> आकर्ण्य आशान्वितः भवत्समीपम् आगतोऽस्मि।</p>	4×1=4

	<p>(क) दानवीरताम् (ग) दानवीरत्वम्</p> <p>(ii) कथं <u>मन्दभाग्या</u> अहं धैर्यं धारयामि । (क) मन्दभाग्य + तल् (ग) मन्दभाग्य + टाप्</p> <p>(iii) अत्र अनेकानि <u>दर्शनीयानि</u> स्थलानि सन्ति । (क) दृश् + तव्यत् (ग) दृश् + मतुप्</p> <p>(iv) एकदा <u>भगवान्</u> बोधिसत्त्वः शिवीनां राजा अभवत् । (क) भग + टाप् (ग) भग + तल्</p>	<p>(ख) दानवीरता (घ) दानवीरा</p> <p>(ख) मन्दभाग्य + त्व (घ) मन्दभाग्य + ठक्</p> <p>(ख) दृश् + अनीयर् (घ) दृश् + ठक्</p> <p>(ख) भग + ठक् (घ) भग + मतुप्</p>	
8. अ	<p>वाच्यानुसारं मञ्जूषायाः उचितपदैः रिक्तस्थानानि पूरयित्वा अधोलिखितं संवादं पुनः लिखत -</p> <p>माहिका - भूमिके! (i) ----- किं लिखसि?</p> <p>भूमिका - माहिके! मया श्लोकाः लिख्यन्ते ।</p> <p>माहिका - त्वं कान् (ii) ----- लिखसि ?</p> <p>भूमिका - मया नीतिश्लोकाः लिख्यन्ते । त्वया अधुना किं (iii) -----?</p> <p>माहिका - अहं संस्कृतकथां पठामि ।</p> <p style="text-align: center;">मञ्जूषा</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">श्लोकान्, क्रियते, त्वम् ।</div> <p style="text-align: center;">अथवा</p> <p>आ वाच्यानुसारम् उचितपदैः रिक्तस्थानानि पूरयित्वा वाक्यानि पुनः लिखत -</p> <p>(i) पिता पुत्राय क्रीडनकं (दा) ----- ।</p> <p>(ii) शताक्ष्या ----- (गीत) श्रूयन्ते ।</p> <p>(iii) ----- (अध्यापक) छात्राः पाठ्यन्ते ।</p>	3×1=3	
9.	<p>कालबोधकशब्दैः अधोलिखित-दिनचर्यां पूरयत-</p> <p>(i) सुखदः ----- (5:30) वादने धावनाय बहिः गच्छति ।</p> <p>(ii) नव्या रात्रौ ----- (12:15) वादनपर्यन्तं गृहपाठम् अकरोत् ।</p> <p>(iii) रुचिरा सायं ----- (6:45) वादने मन्दिरं गच्छति ।</p>	3×1=3	
10.	<p>मञ्जूषायां प्रदत्तैः उचितैः अव्ययपदैः अधोलिखितवाक्येषु रिक्तस्थानानि पूरयत -</p> <p>(i) ----- मधुरभाषिणी वाणी पुरुषं प्रह्लादयति तथा चन्दनरसः न प्रह्लादयति ।</p> <p>(ii) चञ्चलं मनः अभ्यासेन वैराग्येण ----- गृह्यते ।</p> <p>(iii) आचारः प्रथमो धर्मः ----- एतत् विदुषां वचः ।</p>	4×1=4	

	<p>(iv) अहं ----- वनं गच्छामि ।</p> <p style="text-align: center;">मञ्जूषा</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">इति, तु, च, यथा ।</div>	
11.	<p>अधोलिखितवाक्येषु रेखाङ्कित-अशुद्धपदाय उचितपदं चित्वा वाक्यानि पुनः लिखत -</p> <p>(i) अस्मिन् प्रदेशे पञ्चाशदधिकाः नद्यः <u>प्रवहति</u> ।</p> <p>(क) प्रवहसि (ख) प्रवहतः</p> <p>(ग) प्रवहन्ति (घ) प्रवहामि</p> <p>(ii) इन्द्रस्य प्रभावेण राज्ञः सत्यपुण्यबलेन एकं चक्षुः <u>प्रतिष्ठितः</u> अभवत् ।</p> <p>(क) प्रतिष्ठिता (ख) प्रतिष्ठितम्</p> <p>(ग) प्रतिष्ठिताः (घ) प्रतिष्ठितानि</p> <p>(iii) तर्हि न जानासि <u>भवान्</u> तस्य मनोवृत्तिम् ।</p> <p>(क) त्वम् (ख) भवन्तः</p> <p>(ग) युवाम् (घ) भवन्तौ</p>	3×1=3
<p>‘घ’ भागः</p> <p>पठितावबोधनम् (30 अङ्काः)</p>		
12.	<p>अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत -</p> <p>अस्ति कर्मपुरनाम्नि नगरे प्रच्छन्नभाग्य-नामधेयः कश्चित् कुमारः । बाल्ये वयसि विद्यापराङ्मुखः स केनचित् दुष्टबुद्धिनाम्ना चौराणां सह चौर्यकर्मणि निरतः सञ्जातः । एकदा स दुष्टबुद्धिना सार्धं कस्यचित् श्रेष्ठिनः गेहे धनहरणार्थं ग्रामान्तरं प्रस्थितः ।</p> <p>अथ व्रजन्तौ तौ गर्तसङ्कुले मार्गे क्रीडतः कांश्चित् बालकान् प्रेक्ष्य अवदताम् - भो भो बालकाः! कथमत्र नतोन्नते विषमे मार्गे क्रीडथ ? यदि कश्चित् गर्ते पतेत् तर्हि स विकलाङ्गो भूत्वा चिरं क्लेशम् अनुभवेत् । तच्छ्रुत्वा तेषु कश्चित् उदण्डः बालकः उवाच - अयि भो ! यद्येवं तर्हि कथं भवन्तौ सुपथं परित्यज्य अनेन कुपथेन गन्तुं प्रवृत्तौ ? अपि इदं श्रेयस्करम् ?</p> <p>I. एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) कुत्र प्रच्छन्नभाग्य-नामधेयः कश्चित् कुमारः आसीत्?</p> <p>(ii) प्रच्छन्नभाग्यः केन सार्धं धनहरणार्थं ग्रामान्तरं प्रस्थितः?</p> <p>(iii) कीदृशः बालकः उवाच?</p> <p>II. पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) उदण्डः बालकः किम् अकथयत्?</p> <p>(ii) अथ व्रजन्तौ तौ मार्गे क्रीडतः बालकान् दृष्ट्वा किम् अवदताम्?</p> <p>(iii) प्रच्छन्नभाग्यः कदा केन सह च चौर्यकर्मणि निरतः सञ्जातः?</p>	<p>5</p> <p>2×½=1</p> <p>2×1=2</p>

	<p>III. (अ) निर्देशानुसारम् उत्तरत -</p> <p>(i) 'कश्चित् उदण्डः बालकः उवाच।' अत्र किं कर्तृपदम् अस्ति?</p> <p>(ii) 'स विकलाङ्गो भूत्वा चिरं क्लेशम् अनुभवेत्।' अत्र क्रियापदं किम्?</p> <p>अथवा</p> <p>(आ) निर्देशानुसारम् उत्तरत -</p> <p>(i) 'त्यक्त्वा' इत्यस्य किं पर्यायपदं गद्यांशे प्रयुक्तम्?</p> <p>(ii) 'विषमे' इत्यस्य विशेष्यपदं गद्यांशात् चित्वा लिखत।</p>	2×1=2
13.	<p>अधोलिखितपद्ये पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत -</p> <p>अवक्रता यथा चित्ते तथा वाचि भवेद् यदि। तदेवाहुः महात्मानः समत्वमिति तथ्यतः ॥ आचारः प्रथमो धर्मः इत्येतद् विदुषां वचः। तस्माद् रक्षेत् सदाचारं प्राणेभ्योऽपि विशेषतः ॥</p> <p>I. एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) चित्ते तथा वाचि किं भवेत्?</p> <p>(ii) कः प्रथमो धर्मः?</p> <p>(iii) किं प्राणेभ्योऽपि विशेषतः रक्षेत्?</p> <p>II. पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) विदुषां किं वचः?</p> <p>(ii) समत्वं किं भवति?</p> <p>(iii) सदाचारं कथं रक्षेत्?</p> <p>III. (अ) निर्देशानुसारम् उत्तरत -</p> <p>(i) "तदेवाहुः महात्मानः समत्वमिति तथ्यतः।" अत्र वाक्ये क्रियापदं किम्?</p> <p>(ii) 'सरलता' इत्यस्य किं समानार्थकं पदं प्रयुक्तम्?</p> <p>अथवा</p> <p>(आ) निर्देशानुसारम् उत्तरत -</p> <p>(i) 'प्रथमो धर्मः' इत्यनयोः विशेषणपदं चित्वा लिखत।</p> <p>(ii) 'वाण्याम्' इत्यस्य पर्यायपदं लिखत।</p>	<p>5</p> <p>2×½=1</p> <p>2×1=2</p> <p>2×1=2</p>
14.	<p>अधोलिखितं नाट्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत -</p> <p>[स्थानम् - सरस्तीरम्। समयः प्रभातवेला। तत्र राजहंसः हंसी च विहरतः। नेपथ्ये काकध्वनिः श्रूयते।]</p> <p>राजहंसः - अये! किन्तु खलु सरस्तीरे विहरति मयि केनापि कर्कशैः 'का का' शब्दैः वातावरणम् आकुलीक्रियते?</p> <p>राजहंसी - भर्तः! काकात् अन्यः को भवितुमर्हति? अस्य वर्णः अपि कृष्णः, कर्म अपि कृष्णम्। मेध्यम् अमेध्यं सर्वमेव भक्षयति। कर्णकटुशब्दैः</p>	5

	<p>काकः - (प्रविश्य सक्रोधम्) आः किम् उक्तवती भवती ? यदि अहं कृष्णवर्णः तर्हि श्रीरामस्य वर्णः कीदृशः ? श्रीवासुदेवस्य वर्णः कीदृशः ? मुग्धे अहं तु अतीव कर्तव्यपरायणः । प्रभाते 'का का' ध्वनिना सुप्तान् प्रबोधयामि कर्मसु च विनियोजयामि ।</p> <p>राजहंसः - हुं! किमनेन? एतत् कार्यं तु कुक्कुटोऽपि करोति ।</p> <p>काकः - (विहस्य) कुक्कुटः! अरे अद्य कुतः कुक्कुटाः नगरेषु । अहमेव सर्वत्र सुलभः ।</p> <p>I. एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) कर्तव्यपरायणः कः अस्ति?</p> <p>(ii) काकस्य वर्णः कीदृशः अस्ति?</p> <p>(iii) काकध्वनिः कुत्र श्रूयते?</p> <p>II. पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) राजहंसः राजहंसीं किं पृच्छति?</p> <p>(ii) काकः सक्रोधं किं वदति?</p> <p>(iii) राजहंसी भर्तारं किम् उत्तरति?</p> <p>III. (अ) निर्देशानुसारम् उत्तरत -</p> <p>(i) 'पवित्रम्' इत्यस्य किं पर्यायपदम् अत्र प्रयुक्तम्?</p> <p>(ii) 'करोति' इति क्रियापदस्य कर्तृपदं किम् अत्र प्रयुक्तम्?</p> <p>अथवा</p> <p>(आ) निर्देशानुसारम् उत्तरत -</p> <p>(i) 'वर्णः कृष्णः' इत्यनयोः पदयोः विशेष्यपदं चित्वा लिखत ।</p> <p>(ii) 'एतत् कार्यं तु कुक्कुटोऽपि करोति' अस्मिन् वाक्ये क्रियापदं किम्?</p>	<p>$2 \times \frac{1}{2} = 1$</p> <p>$2 \times 1 = 2$</p> <p>$2 \times 1 = 2$</p>
15.	<p>रेखाङ्कित-पदानि आधृत्य प्रश्ननिर्माणं कुरुत -</p> <p>(i) अनुद्वेगकरं वाक्यं वाङ्मयं तपः उच्यते ।</p> <p>(ii) कामः एव अस्माकं शत्रुः ।</p> <p>(iii) गगनात् सहस्रशः उल्काः भूमौ पतन्ति ।</p> <p>(iv) अरुणाचलप्रदेशे अनेके उत्सवाः मान्यन्ते ।</p> <p>(v) दानशालासु विचरन् राजा अचिन्तयत् ।</p>	$5 \times 1 = 5$
16.अ	<p>मञ्जूषातः समुचितपदानि चित्वा अधोलिखित-श्लोकस्य अन्वयं पूरयित्वा पुनः लिखत -</p> <p>शुश्रूषा श्रवणं चैव ग्रहणं धारणं तथा । ऊहापोहार्थविज्ञानं तत्त्वज्ञानं च धीगुणाः ॥</p> <p>अन्वयः - शुश्रूषा (i) ----- च एव, ग्रहणम् तथा (ii) -----, ऊह-अपोह-अर्थविज्ञानम्, (iii) ----- च (iv) ----- (सन्ति) ।</p> <p>मञ्जूषा - तत्त्वज्ञानम्, श्रवणम्, धीगुणाः, धारणम् ।</p> <p>अथवा</p>	$4 \times \frac{1}{2} = 2$

संस्कृतम् (सम्प्रेषणात्मकम्, कोड-सङ्ख्या - 119)

आदर्श-प्रश्नपत्रम्

कक्षा - दशमी (2025-26)

अवधि: - होरात्रयम्

अङ्कयोजना उत्तरसङ्केताश्च

पूर्णाङ्काः - 80

अवधातव्यम् -

1. अङ्कयोजनायां प्रदत्तानि उत्तराणि निदर्शात्मकानि सन्ति । प्रदत्तानि उत्तराणि अतिरिच्यापि सन्दर्भानुसारम् अन्यानि उत्तराणि भवितुम् अर्हन्ति ।
2. आन्तरिकविकल्पात्मकेषु प्रश्नेषु यद्यपि स्पष्टतया निर्देशः दत्तः अस्ति यत् केवलं प्रश्नद्वयम् अथवा प्रश्नत्रयम् इत्यादिकम् उत्तरं दातव्यं तथापि यदि छात्रः अतिरिक्त-प्रश्नानाम् उत्तराणि लिखति तर्हि छात्रहिताय निर्णयः कर्तव्यः । यथा चित्रवर्णने पञ्चवाक्यानां लेखनम् अभीष्टं परं छात्रः यदि सप्तवाक्यानि लिखति तर्हि तत्र केवलं प्रथम-पञ्चवाक्यानां न अपितु यानि वाक्यानि उत्तमानि सन्ति तेषां मूल्याङ्कनं करणीयम् । (अयं नियमः नवम्यां कक्षायाम् अपि पालनीयः ।)
3. गद्यांशे श्लोके नाट्यांशे वा पृष्ठाः प्रश्नाः अवबोधात्मकाः सन्ति । अतः विद्यार्थिनः एतेषु प्रदत्तशब्दानां स्थाने समभाव-पर्यायवाचि-शब्दानां प्रयोगं कर्तुं शक्नुवन्ति । तदर्थम् अङ्काः देयाः । यदि विद्यार्थिनः उत्तरलेखन-समये समुचितानां विभक्तीनां वचनानां च प्रयोगं न कुर्वन्ति तर्हि अंशतः अङ्काः कर्तनीयाः न तु पूर्णाङ्काः ।
4. त्रुटिपूर्णवर्तन्यै व्याकरणात्मक-प्रयोगाय च अनुपाततः अङ्काः कर्तनीयाः न तु सम्पूर्णाङ्काः ।
5. आंशिक-दृष्ट्या समुचितेभ्यः उत्तरेभ्यः अपि अङ्काः देयाः ।
6. रचनात्मक-कार्ये वाक्यरचना प्रमुखा न तु वाक्यसौन्दर्य-तत्त्वम् । अतः आंशिकवाक्यशुद्धये अपि अङ्काः देयाः ।

‘क’ भागः

अपठितावबोधनम्

(10 अङ्काः)

1.

गद्यांशः

अ. एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)

(i) जनानाम्

(ii) कर्तव्यपालनम्

(iii) कर्तव्यम्

आ. पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)

(i) यदा वयं परिश्रमपूर्वकं श्रद्धापूर्वकं च स्वकर्तव्यानि पालयामः तदा देशस्य उन्नतिः भवितुम् अर्हति ।

2×1=2

2×2=4

	<p>(ii) कर्तव्यानां पालनं मनुष्यस्य व्यक्तिगतहिताय देशहिताय च परमावश्यकं भवति ।</p> <p>(iii) अद्यत्वे जनाः अल्पेन एव प्रयासेन कार्यसिद्धिम् इच्छन्ति ।</p> <p>इ. अस्य अनुच्छेदस्य कृते उपयुक्तं शीर्षकं संस्कृतेन लिखत ।</p> <p>कर्तव्यपालनम् अथवा अन्यत् किमपि उचितं शीर्षकम् ।</p> <p>छात्रस्य उत्तरं दृष्ट्वा छात्रहिताय समुचितं मूल्याङ्कनं करणीयम् ।</p> <p>ई. यथानिर्देशम् उत्तरत -</p> <p>(i) (घ) अस्ति</p> <p>(ii) (क) प्रयतन्ते</p> <p>(iii) (ख) अल्पेन</p>	<p>1</p> <p>3×1=3</p>
	<p>भाग: 'ख'</p> <p>रचनात्मकं कार्यम्</p>	
2.	<p>पत्रलेखनम्</p> <p>भवत्या: नाम शर्वाणी । भवत्या: सखी प्रज्ज्वला संस्कृतं पठितुं भवत्या: परामर्शं वाञ्छति । तां प्रेरयितुं लिखितं पत्रं मञ्जूषायां प्रदत्तपदानां सहायतया पूरयित्वा पत्रम् उत्तरपुस्तिकायां लिखतु -</p> <p>डी-401, जनकपुरी</p> <p>(i) नवदिल्लीतः</p> <p>दिनाङ्कः -----</p> <p>प्रिय (ii) प्रज्ज्वले !</p> <p>सस्नेहं नमस्ते ।</p> <p>अत्र कुशलं तत्रास्तु । आशासे त्वम् अपि कुशलिनी स्यात् । भवत्या: पत्रं प्राप्तम् । भवती संस्कृतभाषां पठितुम् इच्छति (iii) इति पठित्वा मम प्रसन्नतायाः सीमा नास्ति । एषा भाषा सर्वाधिका (iv) वैज्ञानिकी अस्ति । संस्कृतम् अस्माकं देशस्य प्रतिष्ठा वर्तते । वेदाः, उपनिषदः, रामायणं, महाभारतं, पुराणानि, महाकाव्यानि, कथासाहित्यम् इत्यादिकं सर्वं (v) वाङ्मयम् अत्यन्तं मार्गदर्शकं, ज्ञानवर्धकं प्रेरणाप्रदं च अस्ति । यथा पुष्पेभ्यः सुगन्धः पृथक् कर्तुं न शक्यते तथैव भारतीयसंस्कृतेः संस्कृतभाषां पृथक् (vi) कर्तुं न शक्यते । संस्कृतेन सम्भाषणम् अस्माकं हृदयेषु (vii) गौरवं वर्धयति, हीनभावनां च नाशयति । अतः त्वम् अवश्यं (viii) संस्कृतं पठ, पठित्वा च अस्याः भाषायाः (ix) प्रचारं कुरु । एवं वयं भारतमातुः सेवां कृत्वा धन्याः भवामः । सर्वेभ्यः अग्रजेभ्यः मम प्रणामाः अनुजेभ्यः च आशीर्वादाः ।</p> <p>भवत्या: सखी,</p> <p>(x) शर्वाणी</p>	<p>10×½=5</p>

<p>3. अ</p> <p>आ</p>	<p>चित्रवर्णनम्</p> <p>अत्र छात्रेभ्यः संक्षिप्तवाक्यरचना अपेक्षिता वर्तते । केवलं वाक्यशुद्धिः द्रष्टव्या । अस्य प्रश्नस्य प्रमुखम् उद्देश्यं वाक्यरचना अस्ति । वाक्यं दीर्घम् अस्ति अथवा लघु इति महत्त्वपूर्णं नास्ति । प्रतिवाक्यम् अर्धः अङ्कः भावस्य कृते अर्धः अङ्कः च व्याकरणदृष्ट्या शुद्धतानिमित्तं निर्धारितः अस्ति । मञ्जूषायां प्रदत्ताः शब्दाः सहायतार्थं सन्ति । छात्रः तेषां वाक्येषु प्रयोगं कुर्यादिव इति अनिवार्यं नास्ति । छात्रः स्वमेधया अपि वाक्यानि निर्मातुं शक्नोति । मञ्जूषायां प्रदत्तानां शब्दानां विभक्तिं परिवर्तनं कृत्वा अपि वाक्यनिर्माणं कर्तुं शक्यते ।</p> <p style="text-align: center;">अथवा</p> <p>अनुच्छेदलेखनम्</p> <p>अयं विकल्पः सर्वेभ्यः अस्ति । छात्राः मञ्जूषायां प्रदत्तानां शब्दानां विभक्तिं परिवर्तनं कृत्वा अपि वाक्यनिर्माणं कर्तुं शक्नुवन्ति । अतः अङ्काः देयाः । अस्य मूल्याङ्कनाय अन्ये नियमाः चित्रवर्णनस्य अनुगुणं पालनीयाः ।</p>	<p>5×1=5</p>
<p>4. अ</p>	<p>संवादपूर्तिः</p> <p>छात्राः - (i) आचार्य! प्रणमामः ।</p> <p>आचार्यः - स्वस्ति, यशस्विनः भवत ।</p> <p>आरुषः - मया श्रुतं यत् श्वः आरभ्य सद्यस्कमाध्यमेन (ऑनलाइन) कक्षा भविष्यति, किमर्थम्?</p> <p>आचार्यः - (ii) भवन्तं कः असूचयत्?</p> <p>मोहितः - अस्माकं कक्षाध्यापिका चर्चायां सामान्यरूपेण अकथयत् यत् कदाचित् श्वः आरभ्यः गृहात् एव कक्षा स्वीकरणीया भवेत् इति ।</p> <p>आचार्यः - भवतां कक्षाध्यापिका सम्यक् सूचितवती । ह्यः वायुगुणवत्ता-सूचकाङ्कः महतीं वृद्धिं प्राप्नोत् तस्मात् सर्वकारः जनानां स्वास्थ्यरक्षणाय सद्यस्कमाध्यमेन गृहात् एव पठितुं कार्यं कर्तुं च निर्देशम् अयच्छत् ।</p> <p>नव्या - (iii) महोदय! गृहे मनः न रमते, अत्रैव वयं पठने आनन्दम् अनुभवामः</p> <p>आचार्यः - सत्यं कथयति, वयं शिक्षकाः अपि साक्षात् कक्षायाम् आगत्य पाठयितुम् इच्छामः ।</p> <p>भूमिका - (iv) पुनः कदा विद्यालये एव कक्षा भविष्यति?</p> <p>आचार्यः - इदानीं तु ईश्वरः एव जानीयात् । यदा प्रदूषणस्य निवारणाय प्रकृतेः च संरक्षणाय वयं जागरूकाः भविष्यामः तदा एव अग्रे एतादृशी विकटा स्थितिः नैव आगमिष्यति ।</p> <p>छात्राः - वयं प्रणं कुर्मः यत् वयं पर्यावरण-रक्षणाय निरन्तरं प्रयासरताः भविष्यामः ।</p> <p>आचार्यः - (v) सत्यं, तदैव इयं वसुन्धरा सुरक्षिता भविष्यति ।</p>	<p>5×1=5</p>

आ	<p style="text-align: center;">अथवा</p> <p>कथापूर्ति:</p> <p>एकः मृत्तिका-घटः आसीत्। (i) घटस्य उपरि स्थितः शरावः यः घटस्य मुखम् आच्छादयति सः एकदा घटम् अपृच्छत् - मित्र घट! मम (ii) मनसि एकः प्रश्नः अस्ति। इदानीं (iii) घर्मकालः अस्ति। यत् किमपि पात्रं यदा भवतः समीपम् आगच्छति तदा भवान् तत्पात्रं (iv) शीतलेन जलेन परिपूरयति। तानि सर्वाणि पात्राणि जलं स्वीकृत्य तृप्तानि भवन्ति। भवन्तम् एकाकिनं विहाय दूरं गच्छन्ति। (v) तानि स्वार्थपरायणानि सन्ति, तथापि भवान् तेभ्यः शीतलं जलं प्रदाय तेषु (vi) अनुग्रहं करोति। अहं सर्वदा भवता सह एव तिष्ठामि कदापि भवन्तं (vii) त्यक्त्वा कुत्रापि न गच्छामि परन्तु भवान् मह्यं कदापि बिन्दुमितम् अपि जलं न यच्छति, किमर्थम्? तदा स्मितं कुर्वन् घटः (viii) मन्दस्वरेण अवदत् - एतस्य कारणं भवतः प्रकृतिः अस्ति। तानि सर्वाणि पात्राणि शिरः अवनम्य जलं याचन्ते अहञ्च तेषाम् इच्छां पूरयामि परं भवान् तु सर्वदा मम (ix) शिरसि एव तिष्ठति तर्हि कथम् अहं भवते जलं दद्याम्? भवान् अपि शिरः अवनम्य (x) जलार्थं याचनां करोतु अहं भवन्तम् अपि निराशं न करिष्यामि।</p>	10×½=5
	<p>भागः 'ग'</p> <p>अनुप्रयुक्तव्याकरणम्</p>	
5. अ	<p>सन्धिः सन्धिच्छेदश्च</p> <p>(i) तप उच्यते। (ii) गात्रेषु + अपि (iii) पञ्चम (iv) सङ्गः + तेषु</p> <p style="text-align: center;">अथवा</p> <p>आ सन्धिः सन्धिच्छेदश्च</p> <p>(i) केचिद् दग्धाः (ii) युधिष्ठिरः + च (iii) वायोरिव (iv) अरुणाचले + अस्मिन्।</p>	4×1=4
6.	<p>समस्तपदं विग्रहः च</p> <p>(i) (घ) निवासाय योग्या (ii) (ग) दम्पती</p>	4×1=4

	(iii) (ख) स्नेहेन सहितम् (iv) (क) असन्तुष्टः	
7.	प्रत्ययाः (i) (क) दानवीरताम् (ii) (ग) मन्दभाग्य + टाप् (iii) (ख) दृश् + अनीयर् (iv) (घ) भग + मतुप्	4×1=4
8. अ	वाच्यम् माहिका - भूमिके! (i) त्वं किं लिखसि? भूमिका - माहिके! मया श्लोकाः लिख्यन्ते। माहिका - त्वं कान् (ii) श्लोकान् लिखसि ? भूमिका - मया नीतिश्लोकाः लिख्यन्ते। त्वया अधुना किं (iii) क्रियते ? माहिका - अहं संस्कृतकथां पठामि। अथवा आ (i) पिता पुत्राय क्रीडनकं (दा) ददाति / यच्छति। (ii) शताक्ष्या <u>गीतानि</u> (गीत) श्रूयन्ते। (iii) अध्यापकेन / अध्यापकाभ्याम्/ अध्यापकैः (अध्यापक) छात्राः पाठ्यन्ते।	3×1=3
9.	समयः (i) सार्ध-पञ्चवादने (ii) सपाद-द्वादशवादनपर्यन्तम् (iii) पादोन-सप्तवादने	3×1=3
10.	अव्ययपदानि (i) यथा (ii) च (iii) इति (iv) तु	4×1=4
11.	अशुद्धिसंशोधनम् (i) (ग) प्रवहन्ति (ii) (ख) प्रतिष्ठितम्	3×1=3

	(iii) (क) त्वम्	
	भाग: 'घ' पठितावबोधनम्	
12.	<p>अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत -</p> <p>I. एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) कर्मपुरनगरे / कर्मपुरनाम्नि नगरे</p> <p>(ii) दुष्टबुद्धिना</p> <p>(iii) उद्दण्डः</p> <p>II. पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) उद्दण्डः बालकः अकथयत् - अयि भो ! यद्येवं तर्हि कथं भवन्तौ सुपथं परित्यज्य अनेन कुपथेन गन्तुं प्रवृत्तौ ? अपि इदं श्रेयस्करम् ?</p> <p>(ii) अथ व्रजन्तौ तौ मार्गे क्रीडतः बालकान् दृष्ट्वा अवदताम् - यदि कश्चित् गर्ते पतेत् तर्हि स विकलाङ्गो भूत्वा चिरं क्लेशम् अनुभवेत् ।</p> <p>(iii) प्रच्छन्नभाग्यः बाल्ये वयसि विद्यापराङ्मुखः स केनचित् दुष्टबुद्धिनाम्ना चौरैण सह चौर्यकर्मणि निरतः सञ्जातः ।</p> <p>III. (अ) निर्देशानुसारम् उत्तरत -</p> <p>(i) बालकः</p> <p>(ii) अनुभवेत्</p> <p style="text-align: center;">अथवा</p> <p>(आ) निर्देशानुसारम् उत्तरत -</p> <p>(i) परित्यज्य</p> <p>(ii) मार्गे</p>	<p>5</p> <p>$2 \times \frac{1}{2} = 1$</p> <p>$2 \times 1 = 2$</p> <p>$2 \times 1 = 2$</p>
13.	<p>पद्ये पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत -</p> <p>I. एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) अवक्रता</p> <p>(ii) आचारः</p> <p>(iii) सदाचारम्</p> <p>II. पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)</p> <p>(i) आचारः प्रथमो धर्मः इत्येतद् विदुषां वचः ।</p> <p>(ii) यथा चित्ते अवक्रता तथा यदि वाचि भवेद् तदेव समत्वं भवति ।</p> <p>(iii) सदाचारं प्राणेभ्योऽपि विशेषतः रक्षेत् ।</p> <p>III. (अ) निर्देशानुसारम् उत्तरत -</p>	<p>5</p> <p>$2 \times \frac{1}{2} = 1$</p> <p>$2 \times 1 = 2$</p> <p>$2 \times 1 = 2$</p>

16.अ	<p>अन्वयपूर्ति:</p> <p>अन्वयः - शुश्रूषा (i) श्रवणम् च एव, ग्रहणम् तथा (ii) धारणम्, ऊह-अपोह-अर्थविज्ञानम्, (iii) तत्त्वज्ञानम् च (iv) धीगुणाः (सन्ति) ।</p> <p style="text-align: center;">अथवा</p> <p>आ भावार्थपूर्ति:</p> <p>भावार्थः - हे महाबाहो! अत्र संशयः नास्ति यत् एतत् (i) मनः अतीव चञ्चलम् अस्ति । इदं (ii) बहुकष्टेन नियन्त्रितं भवति परन्तु यदि वयं पुनः पुनः (iii) अभ्यासं कुर्मः, विरक्ताः च भवामः तदा निश्चयेन एतत् वशीकर्तुं (iv) शक्नुमः ।</p>	4×½=2
17.	<p>प्रसङ्गानुकूलम् उचितार्थचयनम्</p> <p>(i) (ग) उद्गमस्थलम्</p> <p>(ii) (घ) स्थगितः</p> <p>(iii) (ख) चतुर्थांशम्</p> <p>(iv) (क) खिन्नाः</p>	4×1=4
18.	<p>पठितकथा-पूर्तिः -</p> <p>कस्मिंञ्चित् नगरे चन्द्रः (i) नामकः एकः भूपतिः अवसत् । तस्य पुत्राः वानरक्रीडारताः प्रतिदिनं वानरसमूहं (ii) विविधैः भोज्यपदार्थैः सन्तुष्टं कुर्वन्ति स्म । तत्रैव राजगृहे बालवाहनयोग्यं मेषयूथमपि (iii) आसीत् । तत्र एकः मेषः जिह्वायाः लोलुपतावशात् अहर्निशं महानसं प्रविश्य तत्र यद् वस्तु पश्यति तदेव (iv) खादति स्म ततः पाचकाः यत्किञ्चित् काष्ठं मृत्तिकापात्रं कांस्यपात्रं ताम्रपात्रं वा पश्यन्ति स्म, तेन एव शीघ्रं ताडयन्ति स्म । मेषस्य सूपकाराणां च (v) कलहं दृष्ट्वा बुद्धिमान् वानरयूथपतिः अचिन्तयत्- “एतेषां कलहो (vi) वानराणां हिताय नास्ति ।” एवं चिन्तयित्वा सः सर्वान् वानरान् आहूय एकान्ते अवदत्- (vii) भोः बान्धवाः! प्रतिदिनं मेषेण सह सूपकाराणाम् अयं कलहः नूनम् अस्माकं विनाशस्य कारणं भविष्यति अतः वयम् एतत् (viii) राजभवनं त्यक्त्वा वनं गच्छामः । तस्य इमं परामर्शम् अश्रद्धेयं मत्वा रसनास्वादलुब्धाः वानराः गन्तुं सिद्धाः न अभवन् ।</p>	8×½=4

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SCIENCE – Code no. 086
SAMPLE QUESTION PAPER*
CLASS – X (2025-26)

Max. Marks: 80

Time Allowed: 3 hours

General Instructions:

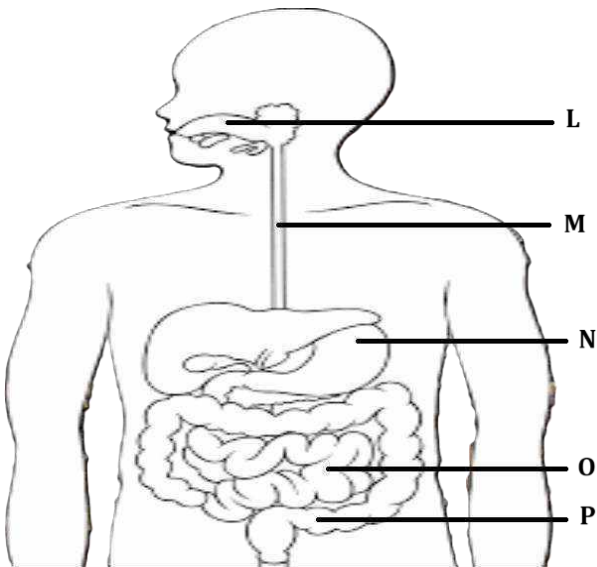
- (i) This question paper consists of 39 questions in 3 sections. Section A is Biology, Section B is Chemistry and Section C is Physics.
- (ii) All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.

Section – A		Marks
1	Select the group in which all organisms have the same mode of nutrition. A. Cuscuta, yeast, legumes, leeches and tapeworm B. Cactus, ticks, lice, leeches and cow C. Cuscuta, ticks, lice, leeches and tapeworm D. Cactus, grass, lice, lion and tapeworm	1
2	Which of the following options indicates the products formed after breakdown of the glucose in our muscle cells when there is lack of oxygen? A. Ethanol + carbon dioxide + Energy B. Lactic acid + Energy C. Lactic acid + carbon monoxide + Energy D. Carbon dioxide + Water + Energy	1
3	Which of the following is a correct combination of function and part of the brain? A. Posture and balance: Cerebrum B. Salivation: Medulla in midbrain C. Hunger: Pons in hindbrain D. Blood pressure: Medulla in hindbrain	1
4	The blood glucose level in a patient was very high. It may be due to inadequate secretion of: A. growth hormone from pituitary gland B. oestrogen from ovary C. insulin from pituitary gland D. insulin from pancreas	1
5	In a cross between black furred rabbit (B) and white furred rabbit (b), all offspring were found to have black fur. What can be inferred about the genetic makeup of the parent rabbits? A. BB X bb B. Bb X Bb C. Bb X bb D. bb X bb	1

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6	<p>Which are the correct statements related to ozone?</p> <p>(i) Ozone layer helps in increasing the UV radiations reaching earth. (ii) Ozone is a deadly poison. (iii) Ozone layer shields the earth from UV radiations. (iv) Ozone layer prevents UV rays which cause skin cancer. (v) Ozone is formed with the help of Chlorofluorocarbons.</p> <p>A. (i), (ii), (iii) B. (ii), (iii), (iv) C. (iii), (iv), (v) D. (i), (iv), (v)</p>	1
7	<p>Which of the following human activities has resulted in an increase of non-biodegradable substances?</p> <p>A. Organic farming B. Increase in tree plantation C. Use of plastic as packaging material D. Composting of kitchen waste</p>	1
<p>The following two questions consist of two statements – Assertion (A) and Reason (R). Answer these questions by selecting the appropriate option given below:</p> <p>A. Both 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.</p>		
8	<p>Assertion (A): Tallness of a pea plant is controlled by an enzyme. Reason (R): The gene for that enzyme makes proteins which help the plant to be tall.</p>	1
9	<p>Assertion (A): Vulture will always have the least amount of pesticides in a food chain. Reason (R): Vulture occupies the last trophic level and it gets only 10% of energy of the previous trophic level.</p>	1
10	<p>Unlike animals, plants do not have any excretory products as they do not eat food. Comment upon the statement with justification.</p>	2
11	<p><u>Students to attempt either option A or B.</u></p> <p>A. How many chambers are there in the heart of the following organisms? How is mixing of oxygenated and deoxygenated blood prevented in their body? (i) Fishes (ii) Humans</p> <p style="text-align: center;">OR</p> <p>B. Explain the mechanism by which the water is transported in plants?</p>	2
12	<p>About 100 acres of forest land was declared as Natural reserve park. The following organisms were predominant in the Natural reserve park:</p>	2

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	<p>rabbit, frog, grass, fish, fox, water insects, zebra, peacock, snake, trees, bird, owl, insects, tiger, vulture, duck.</p> <p>Create a food web comprising two separate food chains with different producers by using the above data.</p>	
13	Draw and explain how the nerve cells help in transmission of impulses?	3
14	<p>In a genetic experiment, plants with pure round green seeds (RRyy) were crossed with plants with wrinkled yellow seeds (rrYY).</p> <p>(i) Show the gametes formed when F1 was self-pollinated.</p> <p>(ii) A total of 144 seeds were produced which developed into saplings. Show the ratio in which these traits are independently inherited in these 144 saplings.</p>	3
15	<p>Neha consumed boiled sweet potatoes and boiled eggs for breakfast. Help her to understand some steps in the process of digestion of the food taken by her by answering the questions given below.</p> <p><u>Attempt either subpart A or B.</u></p> <p>A. Which of these food items is rich in proteins? In which part of the alimentary canal is the digestion of this component initiated? Name the enzymes, conditions required and the glands associated with the digestion here.</p> <p>OR</p> <p>B. Which of these food items contains fats? How is it digested?</p> <p>C. Which of these food items is rich in starch? How is its digestion initiated?</p> <p>D. The figure given below represents parts of the human alimentary canal. Which of these parts will have the maximum amount of digested food as soon as the process of digestion is completed?</p>  <p>The diagram shows a human torso from the neck to the pelvis. The alimentary canal is highlighted. Labels with leader lines point to the following parts: L points to the mouth; M points to the esophagus; N points to the stomach; O points to the small intestine; and P points to the large intestine.</p> <p>Figure: Human Alimentary canal</p>	4

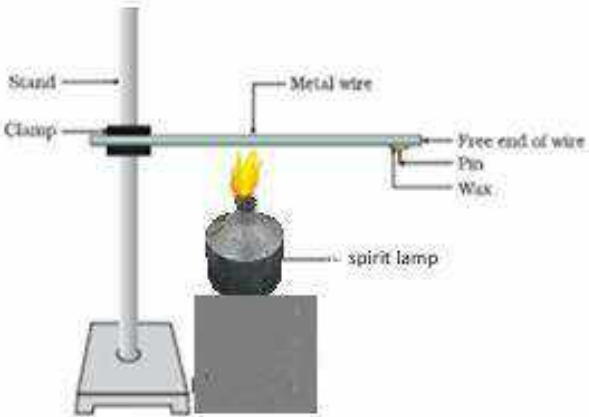
	<p><u>For visually impaired students</u></p> <p>D. How will the digested food be taken up by the alimentary canal?</p>	
16	<p><u>Attempt either option A or B.</u></p> <p>A. Puneet wanted to grow banana plants.</p> <p>(i) Based on your knowledge on plant reproduction should he opt for seeds or any alternate method of reproduction. Justify your answer.</p> <p>(ii) Offsprings of a banana plant usually show very little variation. What causes variation and are variations good or bad? Justify.</p> <p style="text-align: center;">OR</p> <p>B. Annie was conducting research on the number of fruits produced by watermelon under different conditions. She grew 25 watermelon plants each in both glass house A and B. She introduced pollinators in glass house A only.</p> <p>(i) What difference will she observe in the number of fruits produced in the two glass houses? Explain with reason.</p> <p>(ii) List 3 changes that will occur in a flower once it gets fertilized.</p>	5
Section – B		
17	<p>Which of the following equations represent redox reactions and what are the values for 'p' and 'q' in these equations?</p> <p>Equation 1: $\text{Fe}_2\text{O}_3(\text{s}) + 2\text{Al}(\text{s}) \longrightarrow \text{Al}_2\text{O}_3(\text{s}) + p \text{Fe}(\text{l}) + \text{heat}$</p> <p>Equation 2: $2\text{C}_4\text{H}_{10}(\text{g}) + 13\text{O}_2(\text{g}) \xrightarrow{\Delta} 8\text{CO}_2(\text{g}) + q \text{H}_2\text{O}(\text{g})$</p> <p>A. Only equation 1 is a redox reaction, p =1 and q=3</p> <p>B. Both equations 1 and 2 are redox reactions, p= 2 and q=4</p> <p>C. Only equation 2 is a redox reaction, p= 2 and q= 10</p> <p>D. Both equations 1 and 2 are redox reactions, p= 2 and q=10</p>	1
18	<p>Four statements about the reactions of oxides with dilute hydrochloric acid and aqueous sodium hydroxide are listed.</p> <p>I. Aluminium oxide reacts with both dilute hydrochloric acid and aqueous sodium hydroxide.</p> <p>II. Calcium oxide reacts with dilute hydrochloric acid and aqueous sodium hydroxide.</p> <p>III. Zinc oxide reacts with both dilute hydrochloric acid and aqueous sodium hydroxide.</p> <p>IV. Sulphur dioxide does not react with either dilute hydrochloric acid or aqueous sodium hydroxide.</p> <p>Which statements are correct?</p> <p>A. I and II</p> <p>B. I and III</p> <p>C. II and IV</p> <p>D. III and IV</p>	1

19	<p>An iron nail is added to each of the two test tubes 'P' and 'Q' containing aqueous copper (II) sulphate, and aqueous silver nitrate respectively. Which of the following observation is correct?</p> <p>A. In test tube 'P' iron nail is coated with a blue coating and in test tube 'Q' there is no reaction.</p> <p>B. Iron nail is coated with a brown coating in test tube 'P' and silver coating in test tube 'Q'.</p> <p>C. There is no reaction in either of the test tubes 'P' or 'Q'.</p> <p>D. There is no reaction in test tube 'P' but a silver coating on iron nail is seen in test tube 'Q'.</p>	1															
20	<p>Methyl orange is added to dilute hydrochloric acid and to aqueous sodium hydroxide. What is the colour of the methyl orange in each solution?</p> <table border="1"> <thead> <tr> <th>Sample</th><th>colour in dilute hydrochloric acid</th><th>colour in aqueous sodium hydroxide</th></tr> </thead> <tbody> <tr> <td>A</td><td>Orange</td><td>Red</td></tr> <tr> <td>B</td><td>Red</td><td>Yellow</td></tr> <tr> <td>C</td><td>Red</td><td>Orange</td></tr> <tr> <td>D</td><td>Yellow</td><td>Red</td></tr> </tbody> </table>	Sample	colour in dilute hydrochloric acid	colour in aqueous sodium hydroxide	A	Orange	Red	B	Red	Yellow	C	Red	Orange	D	Yellow	Red	1
Sample	colour in dilute hydrochloric acid	colour in aqueous sodium hydroxide															
A	Orange	Red															
B	Red	Yellow															
C	Red	Orange															
D	Yellow	Red															
21	<p>Which of the following substances when dissolved in equal volume of water, will have the highest pH value?</p> <p>A. Sulphuric acid</p> <p>B. Acetic acid</p> <p>C. Magnesium hydroxide</p> <p>D. Sodium hydroxide</p>	1															
22	<p>When excess of carbon dioxide is passed through lime water, the milkiness disappears because</p> <p>A. water soluble calcium carbonate converts to water soluble calcium bicarbonate.</p> <p>B. insoluble calcium carbonate converts to water soluble calcium bicarbonate.</p> <p>C. water soluble calcium carbonate converts to insoluble calcium bicarbonate.</p> <p>D. insoluble calcium carbonate converts to insoluble calcium bicarbonate.</p>	1															
23	<p>In the reaction of aqueous solution of barium chloride with aqueous solution of sodium sulphate, the aqueous solution formed will be:</p> <p>A. BaCl_2</p> <p>B. BaSO_4</p> <p>C. Na_2SO_4</p> <p>D. NaCl</p>	1															
<p>The following question consists of two statements – Assertion (A) and Reason (R). Answer these questions by selecting the appropriate option given below:</p> <p>A. Both A and R are true, and R is the correct explanation of A.</p> <p>B. Both A and R are true, and R is not the correct explanation of A.</p>																	

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C. A is true but R is false.

D. A is false but R is true.

24	<p>Assertion (A): C_4H_8, C_4H_6 and C_4H_{10} are members of the same homologous series</p> <p>Reason (R): C_4H_8, C_4H_6, C_3H_4, C_3H_6, C_2H_4, C_2H_2 are unsaturated hydrocarbons.</p>	1
25	<p>The following activity is set-up in the science lab by the teacher. He clamped an aluminium wire on a stand and fixed a pin to the free end of the wire using wax. Then he heated the wire with a burner from the end where the wire is clamped. Students observed the pin fall off.</p>  <p>A. If the teacher replaces aluminium wire by silver wire, will the students' observation change? Justify your answer.</p> <p>B. Will the aluminium wire melt? Give reason for your answer.</p>	2
26	<p><u>Attempt either option A or B.</u></p> <p>A. An element 'X' is stored in kerosene, and cannot be extracted from its ore using a reducing agent. 'X' forms an ionic compound on reaction with chlorine.</p> <p>(i) Can we store 'X' in water? Give reason to support your answer.</p> <p>(ii) Identify element 'X'. Name the process used and write the equation for extraction of 'X' from its ore.</p> <p style="text-align: center;">OR</p> <p>B. The domes of many building in Europe are made of copper. These domes now appear greenish in colour.</p> <p>(i) Why do the domes appear greenish though copper is orange-red in colour?</p> <p>(ii) In your opinion, should the copper domes be replaced by iron domes to overcome the problem of change of colour of copper domes?</p> <p>(iii) Domes used to be made from thin sheets of metals. Why did the ancient architects use copper to make domes?</p>	3
27	<p>Amrita electrolysed distilled water using the set-up shown in figure 1. She was expecting two gases to be evolved at the anode and cathode respectively</p>	3

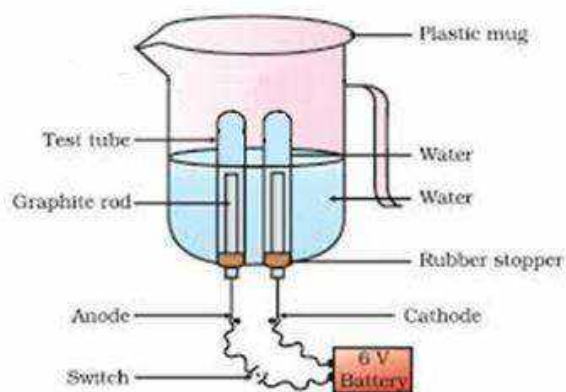


Fig.1

Suddenly, she realised that the bulb in the circuit did not glow when she used distilled water (figure 2)

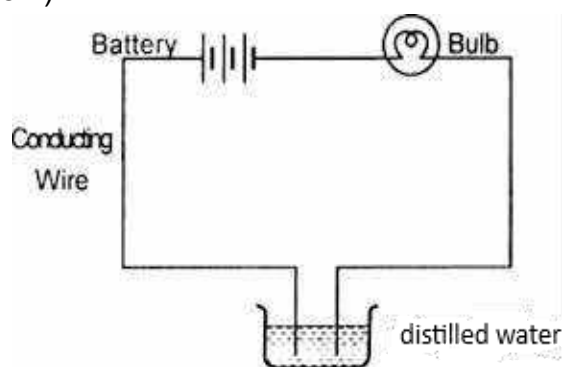


Fig. 2

After this realization, she added a substance to the distilled water for electrolysis to take place.

Answer the following questions based on the information given above:

- Which gas was she expecting to be formed at the anode and which one at the cathode respectively?
- Why did the bulb not glow when Amrita passed electricity through distilled water?
- Which substance was added by Amrita to distilled water to get the expected result?

For visually impaired students

Identify the type of reaction:

- $\text{ZnO} + \text{C} \longrightarrow \text{Zn} + \text{CO}$
- $\text{ZnCO}_3 \xrightarrow{\text{heat}} \text{ZnO} + \text{CO}_2$
- $2\text{Mg} + \text{O}_2 \longrightarrow 2\text{MgO} + \text{heat}$

28	Sara took 2 mL of dilute NaOH solution in a test tube and added two drops of phenolphthalein solution to it. The solution turned pink in colour. She added dilute H ₂ SO ₄ to the above solution drop by drop until the solution in the test tube became colourless. 40 drops of dilute H ₂ SO ₄ were used for the change in
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4

colour from pink to colourless. When Sara added a drop of NaOH to the solution, the colour changed to back to pink again.

Sara now tried the activity with different volumes of NaOH and recorded her observation in the table given below:

S. No.	Volume of dil. NaOH taken (mL)	Drops of dil. H ₂ SO ₄ used
1	2	20
2	3	30
3	4	40

Answer the following questions based on the above information:

- A. If Sara used concentrated H₂SO₄ in place of dilute H₂SO₄, how many drops will be required for the change in colour to be observed?

- (a) 40
(b) < 40
(c) >40

Justify your answer.

- B. Sara measured 20 drops of dil. H₂SO₄ and found its volume to be 1 mL. If Sara observed a change in colour of NaOH solution by using 3 mL of H₂SO₄, how many mL of NaOH did she add to the test tube initially?

OR

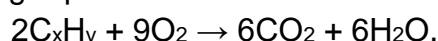
Sara takes 10 drops of dilute H₂SO₄ in the test tube and adds two drops of phenolphthalein solution to it. Then she adds NaOH dropwise. Sara observes a change in colour after adding 20 drops of NaOH. What change in colour would she observe and why?

- C. Write a balanced chemical equation for the reaction taking place in the above experiment. Which of the following is true and why? The reaction is a
- (a) neutralisation and double displacement reaction
(b) neutralisation and precipitation reaction
(c) precipitation and double displacement reaction
(d) neutralisation, double displacement as well as precipitation reaction.

29 Attempt either option A or B.

5

- A. A hydrocarbon with the formula C_xH_y undergoes complete combustion as shown in the following equation:

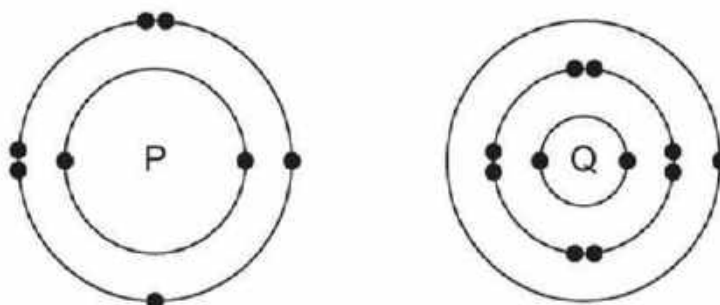


- (a) What are the values of 'x' and 'y'?
(b) Give the chemical (IUPAC) name of the hydrocarbon.
(c) Draw its electron dot structure.
(d) Name the alcohol which on heating with conc. H₂SO₄ will produce the above hydrocarbon C_xH_y.

- (e) Write a balanced chemical equation for the reaction of C_xH_y with hydrogen gas in presence of Nickel.

OR

B. The electronic structures of atoms P and Q are shown below

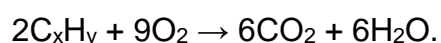


Based on the information given above, answer the following questions:

- If P and Q combine to form a compound, what type of bond is formed between them?
- Give the chemical formula of the compound formed.
- The compound so formed is dissolved in water. Is the resultant solution acidic or basic in nature? Justify your answer.
- Write the chemical equation for the reaction between 'Q' and ethanol.
- What will be the formula of the compound formed when 'P' undergoes bonding with carbon?

For visually impaired students

A. A hydrocarbon with the formula C_xH_y undergoes complete combustion as shown in the following equation:



- What are the values of 'x' and 'y'?
- Give the chemical (IUPAC) name of the hydrocarbon.
- Is C_xH_y a saturated or an unsaturated hydrocarbon?
- Name the alcohol which on heating with conc. H_2SO_4 will produce the above hydrocarbon C_xH_y .
- Write a balanced chemical equation for the reaction of C_xH_y with hydrogen gas in presence of Nickel.

OR

B. Oxygen can combine with both metals and non-metals. It combines with Calcium to form CaO and with carbon to form CO_2 .

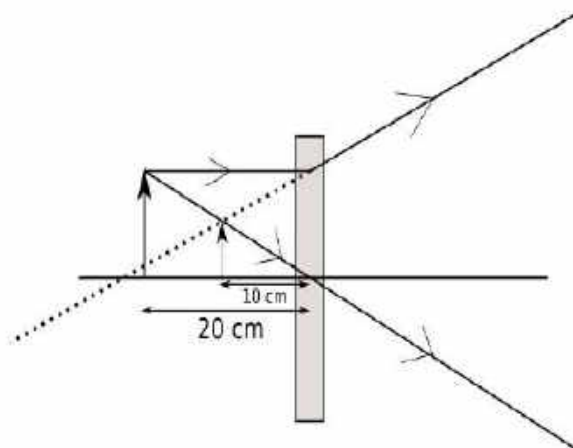
- What type of bond is formed between carbon and oxygen?
- Identify the type of bond formed between Calcium and oxygen.
- Which of the above compounds will be a good conductor of electricity in molten state and why?
- Comment on the physical state (solid, liquid or gas) of CaO and CO_2 .
- What is the valency of carbon in CO_2 ?

Section – C

30	<p>Arnav was making notes and he wrote down the following statements from his understanding of reflection from curved surfaces.</p> <ol style="list-style-type: none"> Concave mirrors can produce both real and virtual images depending on the position of the object. Convex mirrors always produce real, inverted images regardless of the object's position. In both concave and convex mirrors, the image location can be determined using the mirror formula $\frac{1}{f} = \frac{1}{v} + \frac{1}{u}$ where f is the focal length, v is the image distance, and u is the object distance. <p>Choose from the following the correct option that lists the correct statements about reflection from curved surfaces.</p> <ol style="list-style-type: none"> I and II I, II and III II and III I and III 	1
31	<p>Choose the correct option from the below which explains the reason for us to perceive the day sky as blue.</p> <ol style="list-style-type: none"> As sunlight passes through the atmosphere, shorter wavelengths, such as blue are scattered more than other colors. The sky appears blue because all colors are scattered equally, but blue light is stronger and more visible to the human eye. The blue color of the sky is due to longer wavelengths like red and orange scattering more than shorter wavelengths, making blue stand out more. The atmosphere contains blue-colored particles that give the sky its blue appearance. 	1
<p>The following question consists of two statements – Assertion (A) and Reason (R). Answer these questions by selecting the appropriate option given below:</p> <ol style="list-style-type: none"> Both A and R are true, and R is the correct explanation of A. Both A and R are true, and R is not the correct explanation of A. A is true but R is false. A is false but R is true. 		
32	<p>Assertion (A): A point object is placed at a distance of 26 cm from a convex mirror of focal length 26 cm. The image will not form at infinity.</p> <p>Reason (R): For above given system the equation $\frac{1}{f} = \frac{1}{v} + \frac{1}{u}$ gives $v = \infty$.</p>	1

33

2



The above image shows the formation of an image with an optical instrument.

- Identify the optical instrument (shown schematically as a rectangle) in the image.
- What type of image is formed in this case?
- Based on the measurements given in the image, calculate the focal length of the instrument.

For visually impaired students

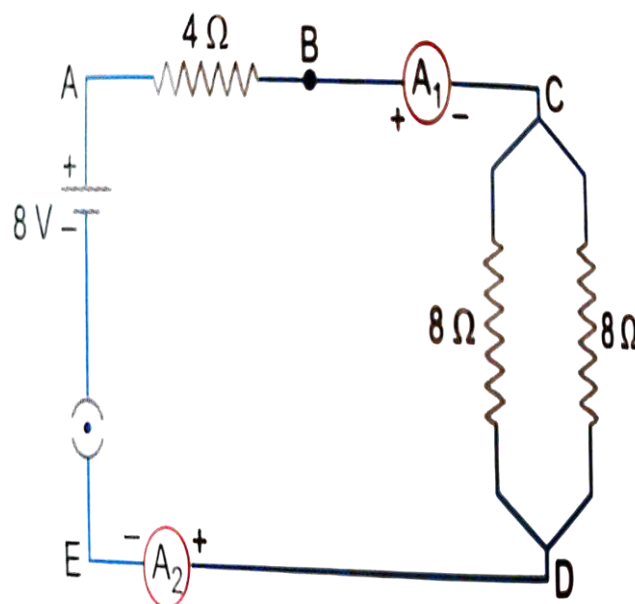
- Under what conditions can a convex lens form a virtual image?
- Why does a piece of paper catch fire if we allow sunlight to pass through a convex lens onto the paper?

34

2

Attempt either option A or B.

A.

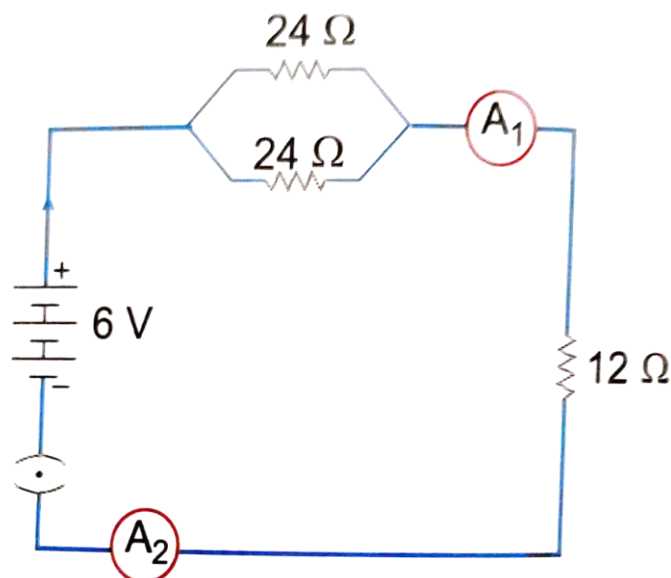


Find out the following in the electric circuit given in the figure-

- Effective resistance of two 8 ohm resistors in the combination.
- Current flowing through the 4-ohm resistor

OR

B.



Study the circuit and find out-

- Current in 12 ohm resistor
- Difference in the readings of ammeter A_1 and A_2 if any

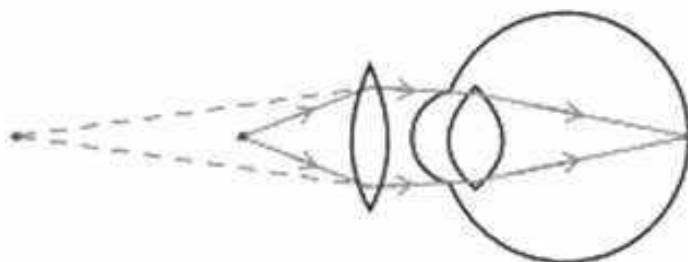
For visually impaired students

- A. You are given four resistors each having resistance of R ohm. Find the maximum and minimum resistance that can be made with these four resistors.

OR

- B. A copper wire has a length $L=2$ m, a cross-sectional area $A=0.5$ mm², and resistivity $\rho=1.7 \times 10^{-8}$ Ω -m. Calculate the resistance of another wire made of the same material whose length is twice the length of the wire but has the same cross-sectional area.

35



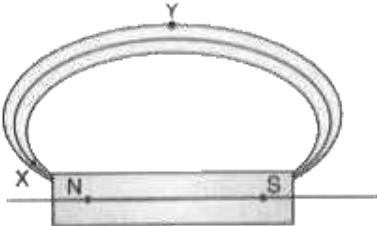
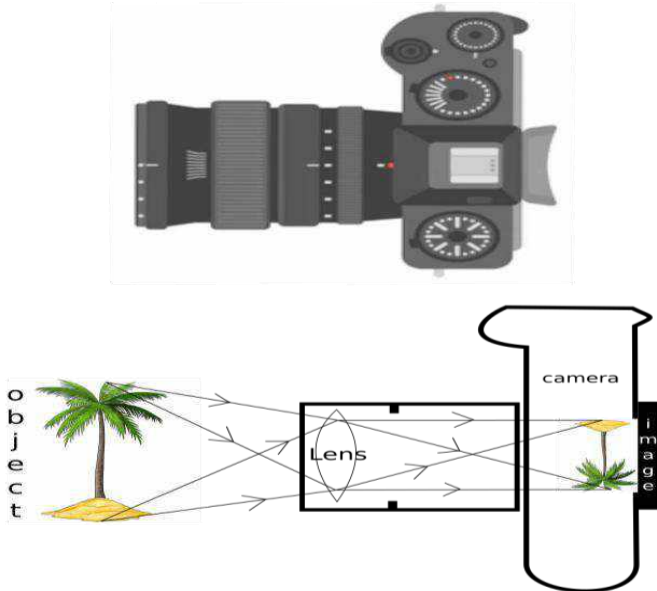
3

The above image shows a corrective measure for a particular defect of vision.

- Identify the defect of vision and state what kind of lens is used to correct this deficiency.
- Draw and label a ray diagram that shows the defect of vision in the above case before correction.

For visually impaired students

- What is dispersion of light?

	(ii) Explain the condition under which dispersion happens? (iii) Give one reason that causes presbyopia.	
36	A student needs to make a $0.12\ \Omega$ resistor. She has some copper wire of 0.80 mm diameter. Resistivity of copper is $1.8 \times 10^{-8}\ \Omega\text{m}$ (i) Determine the cross-sectional area of the wire. (ii) Calculate the length of wire required for the $0.12\ \Omega$ resistor.	3
37	Magnetic field lines are shown in the given diagram. A student makes a statement that the magnetic field at X is stronger than at Y. (i) Explain with reason if the student's claim is correct. (ii) Also redraw the diagram and mark the direction of magnetic field lines. <div style="text-align: center;">  </div>	3
38	<div style="text-align: center;">  </div> <p>The above image is that of a Digital Single Lense Reflector (DSLR) Camera which are used to take high resolution photographs by professional photographers. The second image of the above two is a schematic diagram of how an image is formed on the sensor of the camera. Based on your understanding of the lenses, answer the following questions.</p> <p>A. What type of lens is used in the DSLR camera shown in the image?</p> <p>B. What type of image is formed on the sensor?</p> <p><u>Attempt either subpart C or D.</u></p> <p>C. A photographer is using a DSLR camera with a lens of focal length $f=50\text{ mm}$ to take a close-up photograph of a small object. The lens projects an image onto the camera sensor that is located 60 mm behind the lens. Calculate the object distance (i.e., the distance between the object and the lens).</p>	4

OR

- D. A photographer is using a DSLR camera to take a picture of a flower. The flower is positioned 150 mm away from the camera lens. The actual height of the flower is 80 mm, and the image height formed on the camera's sensor is measured to be 20 mm. Calculate the focal length of the camera lens.

For visually impaired students

Zarina worked as an apprentice in a factory where flashlights and solar cookers are made. She learnt to make the circuits, the design of the light-box and light concentrators of the solar cookers as well. She learnt the uses of lenses in making all those tools. Based on your understanding of lenses, answer the following questions.

- A. What kind of lenses are used in the flashlight and light concentrator of the solar-cooker?
B. Give reasons for your choices in your answer for part A.

Attempt either subpart C or D.

- C. An object is placed 40 cm away from a lens which is normally used in a solar-cooker. The image formed is twice the size of the object. Calculate the focal length of the lens.

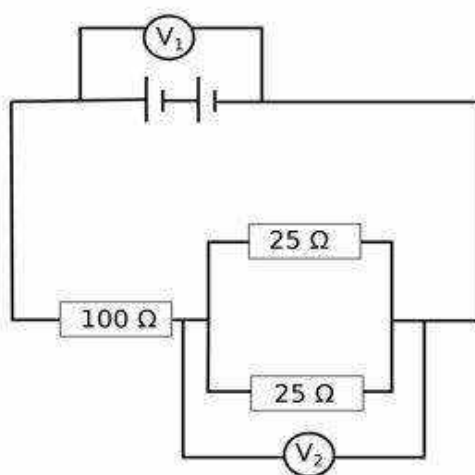
OR

- D. An object is placed 20 cm in front of a lens which is used in a flashlight, and the image is formed 10 cm away from the lens on the same side as the object. Calculate the focal length of the lens.

39

Attempt either option A or B.

A.



The arrangement of resistors shown in the above figure is connected to a battery.;

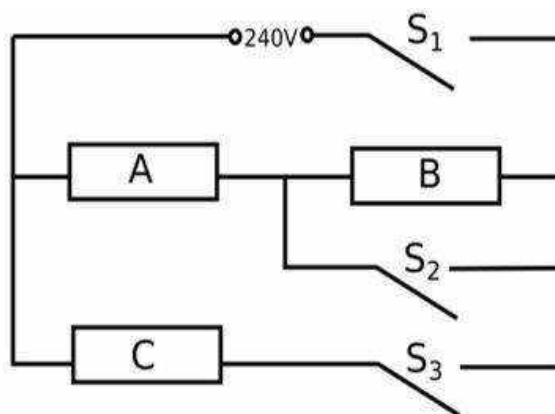
The power dissipation in the $100\ \Omega$ resistor is 81 W. Calculate

- (i) the current in the circuit
(ii) the reading in the voltmeter V_2
(iii) the reading in the voltmeter V_1

5

OR

B.



An electric heater consists of three similar heating elements A, B and C, connected as shown in the figure above. Each heating element is rated as 1.2 kW, 240 V and has constant resistance. S_1 , S_2 and S_3 are respective switches.

The circuit is connected to a 240 V supply.

- (i) Calculate the resistance of one heating element.
- (ii) Calculate the current in each resistor when only S_1 and S_3 are closed.
- (iii) Calculate the power dissipated across A when S_1 , S_2 and S_3 are closed.

For visually impaired students

A.

- (i) Explain why in household circuits only the fuse is connected in series with all the rest of the appliances but all appliances are connected in parallel to each other.
- (ii) In a household circuit, an electric heater of power 1500 W and a fan of power 500 W are connected in parallel to a 220 V supply. A fuse rated for 10 A is connected to the circuit to protect it from excessive current.
 - (a) Calculate the total current drawn by the heater and the fan.
 - (b) Determine whether the 10 A fuse is appropriate for this circuit or if it will blow.

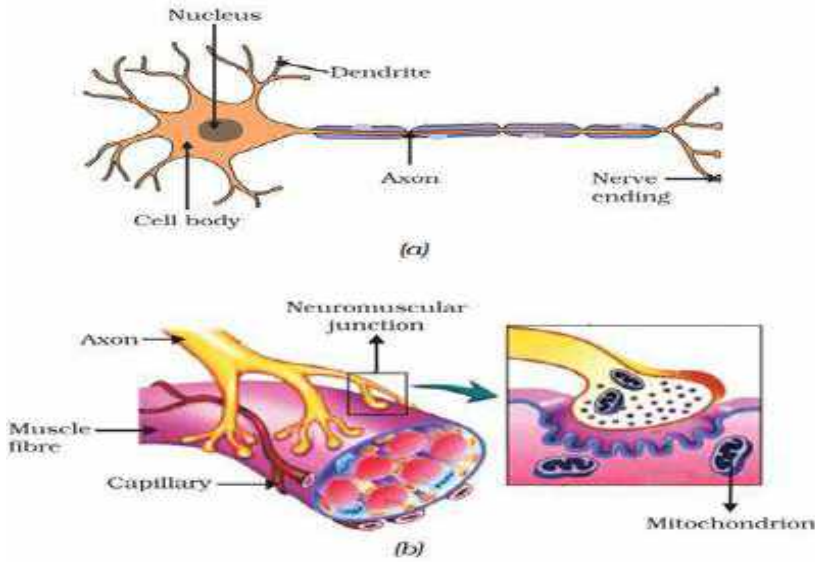
OR

B. Two resistors, $R_1=6\ \Omega$ and $R_2=12\ \Omega$, are connected in parallel to a 24V battery. The circuit operates for 5 minutes.

- (i) Calculate the total heat generated in both resistors.
- (ii) If each resistor has a power rating of 100 W, determine whether it is safe to use these resistors in the circuit.

SCIENCE – Code no. 086
MARKING SCHEME
CLASS – X (2025-26)

Section – A		
1	C. Cuscuta, ticks, lice, leeches and tapeworm; as all of these are parasites.	1
2	B. Lactic acid + Energy	1
3	D. Blood pressure: Medulla in hindbrain	1
4	D. insulin from pancreas	1
5	A. BB x bb	1
6	B. (ii), (iii), (iv)	1
7	C. Use of plastic as packaging material.	1
8	A. Both A and R are true, and R is the correct explanation of A.	1
9	D. A is false but R is true	1
10	<p>It is completely wrong to say that plants do not produce any excretory products.</p> <p>However, plants use completely different strategies for excretion than those of the animals. They get rid of these wastes in different manner (any two):</p> <ul style="list-style-type: none"> i. Oxygen, a photosynthetic waste, is removed through stomata. ii. Excess water is removed by transpiration through stomata. iii. Other metabolic wastes are either stored in dead cells, resins and gums or are removed through falling of old leaves. iv. Many waste products are stored in cellular vacuoles 	2
11	<p><u>Students to attempt either option A or B.</u></p> <p>A.</p> <ul style="list-style-type: none"> (i) There are two chambers in the heart of fish. The blood is pumped to the gills, is oxygenated there and passes directly to the rest of the body. (ii) There are four chambers in the heart of a human being. Separation of the right side and the left side of the heart by septum prevents mixing of oxygenated and de-oxygenated bloods <p style="text-align: center;">OR</p> <p>B. Xylem moves water and minerals obtained from the soil through roots to all other parts of the plant in a unidirectional manner// Transpiration takes place from leaf which causes a transpirational pull in the tracheids and vessels of xylem facilitating upward movement of water// roots</p>	2

	actively uptake ions from the soil, leading to difference in concentration gradient, thereby water moves into the roots to eliminate this difference/ creating a steady movement of water into root xylem.	
12	<p>Tree food chain- tree, zebra, tiger /Any other food chain</p> <p>Grassland food chain- grass, zebra, tiger / Any other food chain</p> <p>Food web- Join the two food chains at a common point (zebra)</p>	2
13	<ul style="list-style-type: none"> All information from our environment is detected by the specialised tips of some nerve cells. The information acquired at the end of the dendritic tip of a nerve cell (Fig. a), sets off a chemical reaction that creates an electrical impulse. This impulse travels from the dendrite to the cell body, and then along the axon to its end. At the end of the axon, the electrical impulse sets off the release of some chemicals. These chemicals cross the gap, or synapse, and start a similar electrical impulse in a dendrite of the next neuron. This is how nervous impulses travel in the body. (Fig b).  <p>Figure (a) Structure of neuron, (b) Neuromuscular junction.</p>	3
14	<p>A. RY, Ry, rY, ry</p> <p>B. The traits which are independently inherited are as follows</p> <p>Tall round: 81</p> <p>Tall wrinkled: 27</p> <p>Short round: 27</p> <p>Short wrinkled: 9</p> <p>(Ratio :- 9 : 3 : 3 : 1)</p>	3
15	<p><u>Students to attempt either subpart A or B.</u></p> <p>A. Eggs are rich in proteins. The digestion of proteins is initiated in the stomach. Gastric glands present in the wall of the stomach release</p>	4

	<p>hydrochloric acid, a protein digesting enzyme called pepsin and mucus. The hydrochloric acid creates an acidic medium which facilitates the action of enzyme pepsin.</p> <p>OR</p> <p>B. Eggs contain fats. Bile juice from the liver breaks down large fat globules into smaller ones for increasing the efficiency of the enzymes and making the medium alkaline. Emulsified fats are digested by lipase secreted by pancreas.</p> <p>C. Sweet potatoes are rich in starch. The saliva secreted by salivary glands present in buccal cavity contain an enzyme called salivary amylase that breaks down starch which is a complex molecule to give sugar.</p> <p>D. Small Intestine will have a maximum amount of digested food as the process of digestion is completed in the small intestine.</p> <p><u>For Visually impaired students</u></p> <p>D. The digested food is taken up by the inner lining of the intestine with the help of finger-like projections or villi which increase the surface area for the absorption.</p>	
16	<p><u>Student to attempt either option A or B.</u></p> <p>(i) Puneet should not choose seeds as banana plants have lost the capacity to produce seeds. He should go for vegetative propagation of banana (by stem cutting).</p> <p>(ii) Errors and variations in DNA copying cause variation. Variation is good as it can help a population tide over unfavourable conditions by survival of some variants. It is bad as parents' desirable characters are lost/ sometimes variants are not able to survive in the new conditions/ the variant is not able to use the cellular apparatus efficiently.</p> <p>OR</p> <p>(i) Watermelon has unisexual flowers, the male and female flowers are separate. The presence of pollinators will facilitate cross pollination between the flowers increasing the chance of fertilization and number of fruits being produced. Without pollinators the probability of pollen falling on stigma reduces in a unisexual flower, especially if they are far apart thus the number of fruits produced will be less.</p> <p>(ii) The three changes observed are:</p> <ul style="list-style-type: none"> • Ovule develops a tough coat and becomes seed. • Ovary grows and ripens to form fruit. • Petals, sepals, stamen, style and stigma may shrivel and fall off. 	5
Section – B		
17	D. Both equations 1 and 2 are redox reactions, p= 2 and q=10	1
18	B. (I) and (III)	1

19	B. Iron nail is coated with a brown coating in test tube 'P' and silver coating in test tube 'Q'.	1			
20	<table border="1"> <tr> <td>B.</td><td>Red</td><td>Yellow</td></tr> </table>	B.	Red	Yellow	1
B.	Red	Yellow			
21	D. Sodium hydroxide	1			
22	B. insoluble calcium carbonate converts to water soluble calcium bicarbonate.	1			
23	D. NaCl	1			
24	D. A is false but R is true	1			
25	<p>A. The pin will drop but will take less time to drop because silver is a better conductor of heat than aluminium.</p> <p>B. No, aluminium wire will not melt because metals have high melting points.</p>	2			
26	<p><u>Attempt either option A or B.</u></p> <p>A.</p> <p>(i) No, 'X' is highly reactive and will catch fire.</p> <p>(ii) Sodium.</p> <p>It is extracted from molten sodium chloride by electrolytic reduction</p> <p>Cathode: $\text{Na}^+ + \text{e}^- \rightarrow \text{Na}$</p> <p>Anode: $2\text{Cl}^- \rightarrow \text{Cl}_2 + 2\text{e}^-$</p> <p>(Potassium is also a correct option)</p> <p style="text-align: center;">OR</p> <p>B.</p> <p>(i) Copper gets oxidised/corroded to basic copper carbonate which is greenish in colour.</p> <p>(ii) No, iron will rust and the reddish layer of rust will come off exposing iron to air, the dome will not be stable. Copper on the other hand on corrosion forms a protective layer which does not allow further corrosion.</p> <p>(iii) Copper is a highly malleable metal, its thin sheets can be used to give different shapes of roofs, like the shape of a dome.</p>	3			
27	<p>A. She was expecting Oxygen gas to be formed at the anode and hydrogen at the cathode.</p> <p>B. Distilled water is a poor conductor of electricity.</p> <p>C. Adding few drops of H_2SO_4 or some NaCl (or any other strong electrolyte).</p> <p><u>For visually impaired students</u></p> <p>A. Redox reaction</p>	3			

	<p>B. Decomposition reaction and endothermic reaction</p> <p>C. Combination reaction and exothermic reaction</p>																
28	<p>A. (b) < 40, because concentrated H₂SO₄ gives more H⁺ ions than dilute acid.</p> <p>B. 3 mL of H₂SO₄ will be 60 drops, which will neutralise 6 mL of NaOH</p> <table border="1"> <thead> <tr> <th>S. No.</th><th>Volume of dil NaOH taken (mL)</th><th>Drops of dil H₂SO₄ used</th></tr> </thead> <tbody> <tr> <td>1</td><td>2</td><td>20 (1 mL)</td></tr> <tr> <td>2</td><td>3</td><td>30 (1.5 mL)</td></tr> <tr> <td>3</td><td>4</td><td>40 (2 mL)</td></tr> <tr> <td>4</td><td>6</td><td>3 mL = 60 drops</td></tr> </tbody> </table> <p>OR</p> <p>Colour will change from colourless to pink. Phenolphthalein is colourless in acids and turns pink in basic solution.</p> <p>C. $2\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$</p> <p>(a) neutralisation and double displacement reaction.</p> <p>Base NaOH is getting neutralised and forming salt + water. It is double displacement as Na⁺ ions are being replaced by H⁺ and OH⁻ by SO₄²⁻. It is not precipitation reaction because Na₂SO₄ is soluble in water.</p>	S. No.	Volume of dil NaOH taken (mL)	Drops of dil H ₂ SO ₄ used	1	2	20 (1 mL)	2	3	30 (1.5 mL)	3	4	40 (2 mL)	4	6	3 mL = 60 drops	4
S. No.	Volume of dil NaOH taken (mL)	Drops of dil H ₂ SO ₄ used															
1	2	20 (1 mL)															
2	3	30 (1.5 mL)															
3	4	40 (2 mL)															
4	6	3 mL = 60 drops															
29	<p><u>Student to attempt either option A or B.</u></p> <p>A.</p> <p>(a) x = 3, y = 6</p> <p>(b) Propene</p> <p>(c)</p> <pre> H H H x x x : : : C :: C .. C x H : : : H H H </pre> <p>(d) Propanol</p> <p>(e) $\text{C}_3\text{H}_6 + \text{H}_2 \xrightarrow{\text{Ni}} \text{C}_3\text{H}_8$</p> <p>$\text{CH}_2=\text{CH}-\text{CH}_3 + \text{H}_2 \xrightarrow{\text{Ni}} \text{CH}_3-\text{CH}_2-\text{CH}_3$</p> <p>OR</p> <p>B.</p> <p>(a) Ionic bond</p> <p>(b) Q₂P</p> <p>(c) Basic, metallic oxides are basic in nature.</p> <p>(d) $2\text{C}_2\text{H}_5\text{OH} + 2\text{Q} \rightarrow 2\text{C}_2\text{H}_5\text{OQ} + \text{H}_2$</p> <p>(e) CP₂</p> <p><u>For visually impaired students</u></p> <p>A.</p> <p>(a) x = 3, y = 6</p>	5															

	(b) Propene (c) Unsaturated hydrocarbon (d) Propanol (e) $\text{C}_3\text{H}_6 + \text{H}_2 \xrightarrow{\text{Ni}} \text{C}_3\text{H}_8$ OR B. (a) Covalent bond (b) Ionic bond (c) CaO, due to presence of free ions in molten state. (d) CaO is solid while CO_2 is a gas. (e) 4	
Section – C		
30	D. I and III	1
31	A. As sunlight passes through the atmosphere, Rayleigh scattering causes shorter wavelengths, such as blue and violet, to scatter more than other colors, but our eyes are more sensitive to blue than violet.	1
32	C. A is true but R is false	1
33	A. The optical instrument shown in the figure is a concave lens. B. The image formed is a virtual image. C. To find the focal length for of a concave lens, we can use the lens formula: $\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$ where: <ul style="list-style-type: none"> $u = -20$ cm (object distance, taken as negative for concave lenses), $v = -10$ cm (image distance, also taken as negative since the image formed by a concave lens is virtual). Solution: 1. Substitute the values into the lens formula: $\frac{1}{f} = \frac{1}{-10} - \frac{1}{-20}$ 2. Simplify the terms: $\frac{1}{f} = \frac{1}{-10} + \frac{1}{20}$ 3. Find a common denominator: $\frac{1}{f} = -\frac{2}{20} + \frac{1}{20} = -\frac{1}{20}$ 4. Solve for f : $f = -20 \text{ cm}$	2

For visually impaired students

- A. A convex lens can form a virtual image when the object is placed between the lens and its focal point.
- B. A convex lens can focus parallel rays of sunlight to a single point, known as the **focal point**. Sunlight contains energy, and when this light is concentrated at a small point, the energy density increases significantly. This focused light energy raises the temperature at the focal point, which can become high enough to ignite a piece of paper placed at that point.

34

Student to attempt either A or B.

2

A.

(i)

$$R = \frac{R_1 R_2}{R_1 + R_2} = \frac{8 \times 8}{8 + 8} = 4 \text{ ohms}$$

(ii)

$$I = \frac{V}{R} = \frac{8}{(4 + 4)} = 1 \text{ A}$$

OR

B.

(i)

$$\frac{1}{R_p} = \frac{1}{R_1} + \frac{1}{R_2} = \frac{1}{24} + \frac{1}{24} = \frac{2}{24}$$

$$R_p = 12 \text{ ohms}$$

$$R_T = R_p + 12 = 24 \text{ ohms}$$

$$I = \frac{V}{R} = \frac{6}{24} = 0.25 \text{ A}$$

(ii) Same readings of A_1 and A_2

For visually impaired students

A.

(i) Maximum Resistance:

- To get the maximum resistance, connect all four resistors in series.
- The total resistance R_{max} in series is the sum of the individual resistance:

$$R_{max} = R + R + R + R = 4R$$

(ii) Minimum Resistance:

- To get the minimum resistance, connect all four resistors in parallel.

- The total resistance R_{min} in parallel is given by:

$$\frac{1}{R_{min}} = \frac{1}{R} + \frac{1}{R} + \frac{1}{R} + \frac{1}{R} = \frac{4}{R}$$

$$R_{min} = \frac{R}{4}$$

OR

B.

$$R = \frac{\rho \cdot l}{A}$$

Given:

- Initial length, $l = 2 \text{ m}$
- Cross-sectional area, $A = 0.5 \text{ mm}^2 = 0.5 \times 10^{-6} \text{ m}^2$
- Resistivity of copper, $\rho = 1.7 \times 10^{-8} \Omega \cdot \text{m}$

Step 1: Calculate the initial resistance R_1 and $l = 2 \text{ m}$

$$R_1 = \frac{\rho \cdot l}{A} = \frac{1.7 \times 10^{-8} \Omega \cdot \text{m} \times 2 \text{ m}}{0.5 \times 10^{-6} \text{ m}^2}$$

$$R_1 = \frac{3.4 \times 10^{-8}}{0.5 \times 10^{-6}} \Omega = 0.068 \Omega$$

Step 2: Calculate the new resistance R_2 and $l = 4 \text{ m}$ (double length)

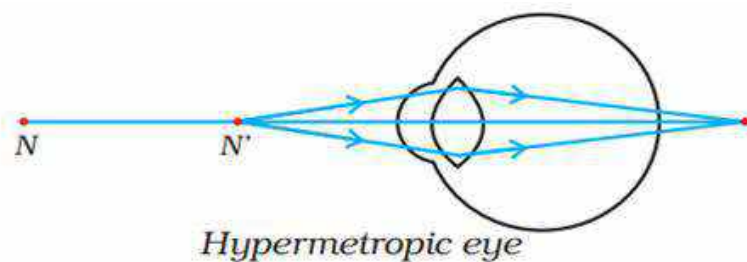
$$R_2 = \frac{\rho \cdot (2l)}{A} = 2 \times R_1 = 2 \times 0.068 \Omega = 0.136 \Omega$$

The resistance of the wire when the length is double is 0.136Ω

35

- Hypermetropia is the deficiency in vision and the lens is convex lens.
-

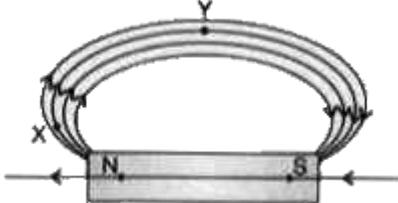
3



For visually impaired students

- Dispersion of light is the phenomenon in which white light separates into its component colors (spectrum) when it passes through a medium, such as a prism. Different colours of light bend through different angles with respect to incident light, thus becoming distinct.

	<p>(ii) Dispersion occurs when light passes from one medium to another where the speed of light is different for each wavelength. For example, in a prism, each color of light has a different refractive index due to varying wavelengths, causing each color to bend at different angles as they exit the prism. Dispersion only happens if the medium has a variable refractive index across different wavelengths, like glass or water.</p> <p>(iii) Presbyopia is caused by the gradual loss of flexibility in the lens of the eye, which occurs with aging. This reduced flexibility prevents the lens from changing shape effectively to focus on close objects, making it difficult to see them clearly.</p>	
36	<p>(i) Show that the cross-sectional area of the wire is about $5 \times 10^{-7} \text{ m}^2$. The cross-sectional area A of a wire with diameter d is given by:</p> $A = \pi \left(\frac{d}{2} \right)^2$ <p>Substitute, $d = 0.80 \times 10^{-3} \text{ m}$:</p> $A = \pi \left(\frac{0.80 \times 10^{-3}}{2} \right)^2$ $A = \pi (0.40 \times 10^{-3})^2$ $A = \pi \times (0.16 \times 10^{-6}) \text{ m}^2$ $A \approx 3.14 \times 0.16 \times 10^{-6} \text{ m}^2$ $A \approx 5.024 \times 10^{-7} \text{ m}^2$ <p>Thus, the cross-sectional area A is approximately $5 \times 10^{-7} \text{ m}^2$.</p> <p>(ii) To find the length l of the wire, we can use the formula of resistance:</p> $R = \frac{\rho \cdot l}{A}$ <p>Rearrange to solve for l:</p> $l = \frac{R \cdot A}{\rho}$ <p>Substitute the values:</p> $l = \frac{0.12 \cdot 5 \times 10^{-7}}{1.8 \times 10^{-8}}$ $l = \frac{6 \times 10^{-8}}{1.8 \times 10^{-8}}$ $l = \frac{6}{1.8} \text{ m}$ $l = 3.33 \text{ m}$ <p>The student needs a length of approximately 3.33 m of given copper wire to make a 0.12Ω resistor.</p>	3

37	<ul style="list-style-type: none"> • Closeness of magnetic field lines is directly related to strength of magnetic field. • Strength of magnetic field at point X (pole) is more than point Y. • If the student redraws the diagram he/she should mark arrows correctly from North to South. 	3
38	<p>A. Convex Lens B. Real and Inverted</p> <p><u>Student to attempt either subpart C or D.</u></p> <p>C. To find the object distance (u) for the lens, we can use the lens formula:</p> $\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$ <p>where:</p> <ul style="list-style-type: none"> • $f = 50$ mm (focal length), • $v = 60$ mm (image distance), • u is the object distance, which we need to calculate. <p>Rearranging the formula to solve for u:</p> $\frac{1}{u} = \frac{1}{v} - \frac{1}{f}$ <p>Substitute the values:</p> $\frac{1}{u} = \frac{1}{60} - \frac{1}{50}$ <p>Calculate each term:</p> $\frac{1}{u} = \frac{50 - 60}{3000} = \frac{-10}{3000} = -\frac{1}{300}$ <p>Thus, the negative sign indicates that the object is located 300 mm in front of the lens (on the opposite side from the image). So, the object distance is:</p> $u = 300 \text{ mm}$ <p>OR</p> <p>D. image height = - 20 mm object height = 80 mm The magnification (m) of the lens is given by:</p> $m = \frac{\text{image height}}{\text{object height}}$ <p>Substituting the values:</p> $m = \frac{-20 \text{ mm}}{80 \text{ mm}} = -\frac{1}{4}$	4

Thus, the magnification $m = -0.25$ mm.

Magnification is also given by:

$$m = \frac{v}{u}$$

where:

- v is the image distance
- $u = -150$ mm

Rearrange to solve for v :

$$v = m \times u = -0.25 \times -150 \text{ mm} = 37.5 \text{ mm}$$

So, the image distance $v = 37.5$ mm.

The lens formula is:

$$\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$$

Substituting the values of v and u :

$$\frac{1}{f} = \frac{1}{37.5} + \frac{1}{150}$$

Converting to a common denominator:

$$\frac{1}{f} = \frac{4 + 1}{150} = \frac{5}{150} = \frac{1}{30}$$

Thus, $f = 30$ mm

Answer: The focal length of the camera lens is 30 mm.

For visually impaired students

- A. Concave Lens for Flashlight and Convex Lens for solar cooker.
- B. Concave lens diverges the light rays which is needed for a wider reach of the flashlight. Convex lens converges the rays which helps to raise the temperature of the place where rays converge.

Student to attempt either subpart C or D

- C. To find the focal length (f) of the lens, we can use the information about the object distance (u) and the magnification (m).

Given:

- Object distance, $u = -40$ cm
- The image is twice the size of the object, so the magnification,
 $m = -2$

Since the magnification $m = \frac{v}{u}$, we can rearrange this to find the image distance v :

$$v = m \times u$$

Substitute the values for m and u :

$$v = -2 \times -40 = 80 \text{ cm}$$

The lens formula is :

$$\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$$

Substitute $v = 80 \text{ cm}$ and $u = -40 \text{ cm}$:

$$\frac{1}{f} = \frac{1}{80} - \frac{1}{-40} = \frac{1}{80} + \frac{1}{40}$$

Convert to a common denominator:

$$\frac{1}{f} = \frac{1+2}{80} = \frac{3}{80}$$

Thus,

$$f = \frac{80}{3} = 26.67 \text{ cm (approximately)}$$

Answer : The focal length of the lens is approximately 26.67 cm.

OR

D.

- Object distance, $u = -20 \text{ cm}$
- Image distance $v = -10 \text{ cm}$ (since the image is on the same side as the object)

We can use the lens formula to calculate the focal length (f) :

$$\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$$

Substitute the values of v and u :

$$\frac{1}{f} = \frac{1}{-10} - \frac{1}{-20} = \frac{1}{-10} + \frac{1}{20}$$

Finding a common denominator:

$$\frac{1}{f} = \frac{-2}{20} + \frac{1}{20} = -\frac{1}{20}$$

Thus,

$$f = -20 \text{ cm}$$

Answer: The focal length of the lens is - 20 cm, indicating it is a diverging lens (concave lens).

39

Students to attempt either option A or B.

A.

(i) Power across the 100Ω resistance = 81 W

$$P = I^2 R = 81 \text{ W}$$

$$\therefore I^2 = \frac{81}{100}$$

$$\therefore I = \sqrt{\frac{81}{100}} = \frac{9}{10} = 0.9 \text{ A}$$

5

- (ii) Voltage across the $25\ \Omega$ resistors $= V_2 = IR_{eqv}$
for the $25\ \Omega$ resistors

$$\frac{1}{R_{eqv}} = \frac{1}{25} + \frac{1}{25} = \frac{2}{25}$$

$$\therefore R_{eqv} = \frac{25}{2} = 12.5\ \Omega$$

$$\therefore V_2 = 0.9\ A \times 12.5\ \Omega = 11.25\ V$$

- (iii) Voltage across $100\ \Omega = V_{100} = IR = 0.9\ A \times 100\ \Omega = 90\ V$

$$\therefore V_1 = 90\ V + 11.25\ V = 101.25\ V$$

OR

B.

(i) $P = \frac{V^2}{R}$

$$\therefore R = \frac{V^2}{P} = \frac{240 \times 240}{1200} = 48\ \Omega$$

- (ii) For S_1 and S_3 closed

– Current in C

$$V = IR \text{ (Ohm's Law)}$$

$$\therefore I = \frac{V}{R} = \frac{240\ V}{48\ \Omega} = 5\ A$$

– Current in A and B

$$V = IR \text{ (Ohm's Law)}$$

$$\therefore I = \frac{V}{R} = \frac{240\ V}{96\ \Omega} = 2.5\ A$$

- (iii) Power across A for S_1, S_2, S_3 closed

$$P_A = I^2 R = 5^2 \times 48 = 1200\ W = 1.2\ KW$$

For visually impaired students

A.

- (i) In household circuits, the fuse is connected in series with all appliances to ensure that it can cut off the entire circuit in case of excessive current, preventing hazards like fires or damage. This way, any overload or short circuit causes the fuse to blow, protecting all appliances.

Appliances are connected in parallel to ensure each receives the same voltage from the mains and can operate independently. This setup allows appliances to work simultaneously and efficiently, with each drawing only the current it needs, without affecting others.

Give Data:

- Power of heater, $P_{\text{heater}} = 1500\ W$
- Power of Fan, $P_{\text{fan}} = 500\ W$

- Supply Voltage, $V = 220 \text{ V}$
- Fuse rating = 10 A

Step 1: Calculate the Current Drawn by Each Appliance

Using the formula = $I = \frac{P}{V}$:

1. Current drawn by the heater:

$$I_{\text{heater}} = \frac{P_{\text{heater}}}{V} = \frac{1500 \text{ W}}{220 \text{ V}}$$

$$I_{\text{heater}} = 6.82 \text{ A (rounded to two decimal places)}$$

2. Current drawn by the fan:

$$I_{\text{fan}} = \frac{P_{\text{fan}}}{V} = \frac{500 \text{ W}}{220 \text{ V}}$$

$$I_{\text{fan}} = 2.27 \text{ A (rounded to two decimal places)}$$

Step 2 : Calculate the total current in the circuit

Since the heater and fan are connected in parallel, the total current I_{total} is the sum of the currents through each appliance:

$$I_{\text{total}} = I_{\text{heater}} + I_{\text{fan}}$$

$$I_{\text{total}} = 6.82 \text{ A} + 2.27 \text{ A}$$

$$I_{\text{total}} = 9.09 \text{ A}$$

Step 3: Compare with the Fuse Rating

The fuse is rated for 10 A , and the total current drawn by the heater and fan together is 9.09 A .

Since $9.09 \text{ A} < 10 \text{ A}$, the fuse will not blow and is appropriate for this circuit, as the total current is within the fuse's capacity.

OR

B.

Given data:

- Resistor $R_1 = 6 \Omega$
- Resistor $R_2 = 12 \Omega$
- Voltage $V = 24 \text{ V}$
- Time $t = 5 \text{ Minutes} = 5 \times 60 = 300 \text{ seconds}$

Step 1: Calculate the Current through each Resistor

Since the resistors are connected in parallel, the voltage across each resistor is the same as the battery voltage, $V = 24 \text{ V}$.

Using Ohm's Law, $I = \frac{V}{R}$:

Current through R_1

$$I_1 = \frac{V}{R_1} = \frac{24\text{ V}}{6\Omega} = 4\text{ A}$$

Current through R_2 :

$$I_2 = \frac{V}{R_2} = \frac{24\text{ V}}{12\Omega} = 2\text{ A}$$

Step 2: Calculate the Heat Generated in Each Resistor

Using Joule's Law of Heating, $H = I^2 R t$:

- Heat generate in R_1 :

$$H_1 = I_1^2 \times R_1 \times t = (4\text{ A})^2 \times 6\Omega \times 300\text{ s}$$

$$H_1 = 16 \times 6 \times 300 = 28800\text{ J}$$

- Heat generate in R_2 :

$$H_2 = I_2^2 \times R_2 \times t = (2\text{ A})^2 \times 12\Omega \times 300\text{ s}$$

$$H_2 = 4 \times 12 \times 300 = 14400\text{ J}$$

- Total Heat Generated H :

$$H_{\text{total}} = H_1 + H_2 = 28800\text{ J} + 14400\text{ J} = 43200\text{ J}$$

So, the total heat generated in both resistor is **43200 J**.

Step 3 : Determine if each Resistor is safe

The power dissipated by each resistor can be calculated using $P = V \times I$

- Power dissipated by R_1 :

$$P_1 = V \times I_1 = 24\text{ V} \times 4\text{ A} = 96\text{ W}$$

- Power dissipated by R_2 :

$$P_2 = V \times I_2 = 24\text{ V} \times 2\text{ A} = 48\text{ W}$$

Given that the power rating of each resistor is 100 W:

- R_1 is operating at 96 W, which is within the 100 W limit. Hence, it is safe.
- R_2 is operating at 48 W, which is also within the 100 W limit. Hence, it is safe.

SOCIAL SCIENCE-Code- 087
SAMPLE QUESTION PAPER
CLASS: X (2025-26)

Time Allowed: 3 Hours

Maximum Marks: 80

General Instructions:

1. There are 38 questions in the Question paper. All questions are compulsory.
2. The question paper has Four Sections – A-History, B-Geography C- Political Science, and D-Economics.
3. Each Section is of 20 Marks and has MCQs, VSA, SA, LAs and CBQ.
4. Very Short Answer Type Questions (VSA), carry 2 marks each. Answers to each question should not exceed 40 words.
5. Short Answer Type Questions (SA), carry 3 marks each. Answers to each question should not exceed 60 words.
6. Long answer type questions (LA), carry 5 marks each. Answers to each question should not exceed 120 words.
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.
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)
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.
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.

Sr.No	SECTION A HISTORY (20 marks)	Marks
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- | | | |
|----|--|---|
| 1. | Match the following and Choose the correct option: | 1 |
|----|--|---|

	COLUMN I		COLUMN II
A	Frederic Sorrieu	1	Torch of enlightenments
B	Statue of Liberty	2	Shattered remains of absolutist Institutions
C	Foreground in front of the Statue of Liberty	3	Democratic and Social Republics
D	Sorrieu's utopian vision.	4	French Artist

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

2. Identify and name the leader shown in the picture given below: -

1



Source-India and the Contemporary World-II, NCERT

- A. Lala Lajpat Rai
- B. Bal Gangadhar Tilak
- C. Gopal Krishan Gokhale
- D. Raja Rammohan Roy

Note: The following question is for Visually Impaired Candidates only in lieu of Q. No. 2

Which one option from the following is the appropriate reason for the formation of the Swaraj party?

- A. To ask for Poorna Swaraj for Indians.
- B. To return to Council Politics.
- C. To ask Dominion State for India.
- D. To oppose Simon Commission.

3. Thousands of people fled Europe for America in the 19th century due to -

1

- A. Widespread poverty and deadly diseases
- B. Frequent famines and poor living conditions
- C. Continuous wars and political instability
- D. Harsh climate and repeated natural disasters

4. Louise-Sebastien Mercier proclaimed "Tremble, therefore, tyrants of the world! Tremble before the virtual writer!" Who are referred to as the tyrants in this context?

1

- A. Educated classes who wanted to change the society
- B. Absolutist institutions like monarchy and church
- C. Authors of the new books
- D. Printing press

- 5A. "The Silk route was a good example of vibrant pre-modern trade and cultural links between distant parts of the world." Explain the statement with any two examples. **2**

OR

- 5B. 'Sometimes the new crops could make the difference between life and death.' Explain the statement.

- 6 A. 'A variety of cultural processes played an important role in developing a sense of nationalism in India'. Support the statement with suitable examples. **3**

OR

- 6 B. Salt March 'became an effective tool of resistance against colonialism.' Justify the statement with suitable arguments.

- 7A. 'In Britain the formation of the nation-state was not the result of a sudden upheaval or revolution but was the result of a long-drawn-out process.' Analyze this statement with suitable reasons. **5**

OR

- 7B. 'The Treaty of Vienna was drawn up in 1815 with the object of undoing most of the changes that had come about in Europe during the Napoleonic wars.' Highlight the significant provisions of this treaty.

8. **Read the given text and answer the following questions:(1+1+2=4)** **4**

Why Newspapers?

Krishnaji Trimbuck Ranade inhabitant of Poona intends to publish a Newspaper in the Marathi Language with a view of affording useful information on every topic of local interest. It will be open for free discussion on subjects of general utility, scientific investigation and the speculations connected with the antiquities, statistics, curiosities, history and geography of the country and of the Deccan especially... the patronage and support of all interested in the diffusion of knowledge and Welfare of the People is earnestly solicited.

Bombay Telegraph and Courier, 6 January 1849

"The task of the native newspapers and political associations is identical to the role of the Opposition in the House of Commons in Parliament in England. That is to critically examine government policy to suggest improvements, by removing those parts that will not be to the benefit of the people, and also by ensuring speedy implementation.

These associations ought to carefully study the particular issues, gather diverse relevant information on the nation as well as on what are the possible and desirable improvements, and this will surely earn it considerable influence".

Source: Native Opinion, 3 April 1870

- 8.1. Explain the main reason for publishing newspapers by Krishna ji.

- 8.2. How was the task of native newspaper and political association seen identical to the role of the opposition?
- 8.3. Analyze the reasons for the popularity of newspapers during the 19th century.

MAP SKILL-BASED QUESTION (2 marks)

9. Two places A and B have been marked on the given outline map of India. Identify them and write their correct names on the lines marked on the map. **(1+1=2)**
- A) The place where the Civil Disobedience Movement was launched.
- B) The city where Indian National Congress session was held in September 1920.

Note: The following question is for Visually Impaired Candidates only in lieu of Question 9.

- A) The place where the Civil Disobedience Movement was launched.
- B) The place where Indian National Congress session was held in September 1920

SECTION B GEOGRAPHY (20 marks)

10. What is essential for resource development to contribute to overall development? **1**
- A. The availability of resources alone is enough.
- B. The presence of foreign invaders and their governance.
- C. Technological development and institutional changes.
- D. Only human resources can contribute to development.
11. Identify the appropriate option to fill in the empty boxes: **1**

Classification of Soils

Alluvial	?	?
Ideal for the growth of sugarcane, paddy, wheat and other cereal and pulse crops.	Ideal for growing cotton	suitable for crops like cashew nut.

- A. Black soil, Red and Yellow soils
- B. Laterite soil, Black soil.
- C. Red & Yellow soils & Black soil.
- D. Black soil & Laterite soil.
12. A total of 628 tigers died in India during the past five years due to natural causes and **1**

other reasons, including poaching, according to government data. Meanwhile, 349 people were killed in tiger attacks during this period, with Maharashtra alone recording 200 deaths.

[source: <https://www.ptinews.com/story/national/628-tigers-died-in-india-in-past-five-years-govt-data/1685133/>]

Which of the following is the most significant indirect consequence of poaching on the tiger population?

- A. Reduction in the prey species, dwindling tiger's food supply.
- B. Increase in human-wildlife conflicts in protected areas
- C. Rise in the tiger population.
- D. Decrease in tourism revenue in national parks

13. Based on the classification of forests, which of the following statements would most likely apply to states like Jammu and Kashmir, Andhra Pradesh, and Kerala? **1**
- A. These states mostly have forests managed as reserved or protected forests for conservation.
 - B. They rely on unclassified forests and local community management for forest conservation.
 - C. They have forest resources and primarily focus on industrial development.
 - D. There are no classified forests and forest management is entirely left to private ownership.
14. Which one of the following states has made roof top water harvesting compulsory in India? **1**
- A. Haryana
 - B. Punjab
 - C. Assam
 - D. Tamil Nadu.
15. Which of the following statements best evaluates the overall goal of the *Pradhan Mantri Krishi Sinchae Yojana*? **1**
- A. Addressing the negative ecological effects of large dams by reducing water usage.
 - B. To provide better irrigation systems and sustainable water conservation practices for farmers.
 - C. Shifting farmers from traditional crops to more commercial, water-intensive crops.
 - D. Preserve the natural river flow and prevent the fragmentation of aquatic ecosystems.
16. Rice is grown as a commercial crop in Haryana and Punjab, but as a subsistence crop in Odisha. Using your understanding of geographical factors and economic practices, explain why rice cultivation differs in these regions. **2**
- 17A. Person P is willing to establish a mineral based industry. He has been advised to set up a bauxite industry in Odisha as a suitable way to make a profitable venture. Analyse the possible reasons behind the advice given to her. **5**

OR

- 17B.** 'Coal is the most important and abundant fossil fuel in India.' Justify the statement by evaluating the significant role it plays in the growth of the Indian economy in its different forms.

18. Read the given text and answer the following questions:(1+2+1=4)

4

Global pollution is rising due to rapid economic growth, population increases, and insufficient environmental management. This poses serious health risks for people and ecosystems, particularly in low- and middle-income countries. Contributing to these challenges, the global economy relies on deeply intertwined supply chains, sustained by more than 100 billion tons of raw materials entering the system each year. Intensive material consumption depletes natural resources and causes negative environmental impacts at every stage of the product lifecycle. Global waste is expected to increase to 3.4 billion tons by 2050.

Pollution of all types hinders development outcomes. Exposure to air pollution, water pollution, and hazardous chemicals and wastes like mercury, lead and persistent organic pollutants (POPs) causes debilitating and fatal illnesses, creates harmful living conditions, and destroys ecosystems. Pollution undermines sustainable economic growth, exacerbates poverty and inequality in both urban and rural areas, and significantly contributes to climate change. Poor people, who cannot afford to protect themselves from the negative impacts of pollution, end up suffering the most. Pollution is the largest environmental cause of disease and premature death. It is estimated to be several times more deaths than from AIDS, tuberculosis, and malaria combined. Global health crises, such as the COVID-19 pandemic, are reminders of the strong linkages between environment and health and of the need to address such linkages systematically.

[Source: <https://www.worldbank.org/en/topic/pollution>]

18.1 Why do you think is global waste expected to increase by 2050?

18.2 How do manufacturing industries cause pollution of different types? Explain with examples.

18.3 Is it correct to consider pollution as a possible cause for worsening of the current global trends of poverty and inequality? Justify.

MAP SKILL-BASED QUESTION (3 marks)

- 19.** On the same outline map of India locate and label the following with suitable symbols:

1

I.(p) The dam in the Sutlej-Beas river basin, which is being used both for hydel power production and irrigation.

OR

(q) The dam in the Mahanadi basin that integrates conservation of water with flood control.

II. Any two of the following:

(i) A major sea port in West Bengal

(1x2=2)

- (ii) An international airport in Tamil Nadu
- (iii) An international airport in Punjab

Note: The following question is for Visually Impaired Candidates only in lieu of Q. No. 19.

b) Answer **any three** of the following:

- i Name the dam in the Mahanadi basin that integrates conservation of water with flood control.
- ii Specify the name of a major sea port in West Bengal.
- iii Name an international airport in Tamil Nadu.
- iv State the name of an international airport in Punjab.

SECTION C POLITICAL SCIENCE (20 marks)

- 20.** Which of the following statement(s) are true with respect to the ethnic composition of Belgium? **1**
- I. 59 percent of the total population of Belgium lives in the Wallonia region and speaks French.
 - II. 40 percent live in the Flemish region and speak Dutch.
 - III. One percent of the Belgians speak German.
 - IV. In the capital city Brussels, 80 percent people speak French while 20 per cent are Dutch speaking.

Choose the correct option:

- A. I and II
 - B. III and IV
 - C. I, II and III
 - D. I and IV
- 21.** The cartoon below depicts Germany's government that was formed after the 2005 elections. It included the two major parties of the country, namely the Christian Democratic Union and the Social Democratic Party. The two parties are historically rivals to each other. Which of the following options best explains the cartoon? **1**



Source-Democratic Politics, NCERT

- A. Coalition Government.
- B. Two Party System.
- C. Democratic government.
- D. Bi-party system.

Note: The following question is for Visually Impaired Candidates only in lieu of Q. No. 21

Consider the following statements on Power Sharing and choose the correct statement(s) -

- I. Imposing the will of the majority community over others.
- II. It helps in reducing the possibility of conflict between the social groups.
- III. Power Sharing is a good way to ensure the stability of political order.
- IV. It brings socio- political opposition among parties.

Choose the correct option:

- A. I and II
- B. I and III
- C. II and IV
- D. II and III

22. Consider the following case and choose the correct option-

1

Suppose the Government of India plans to issue new currency notes of different denominations in order to curb the influence of black money. The Government of one state is opposed to this policy of the Central Government. Can the state government stop the union government from implementing this policy?

- A. Yes, because Currency is the subject of State List
- B. No, because Currency is a subject of Union List
- C. Yes, because the approval of both the governments is necessary to implement this change.
- D. No, because any such change must be approved by the local government also.

23. Two statements are given as Assertion (A) and Reason(R). Study the statements carefully and identify the correct alternative:

1

ASSERTION (A): Exclusive attention to caste can produce negative results in democracy.

REASON (R): It can divert attention from other important issues thus leading to tensions, conflicts and even violence.

Choose the correct option:

- A. Both A and R are true, and R is the correct explanation of A.
- B. Both A and R are true, but R is not the correct explanation of A.
- C. A is true but R is false.
- D. A is false but R is true

24. Highlight any two key features of federalism. 2
25. 'Women in India face discrimination, disadvantages and oppression in many ways.' Highlight any two aspects of life where you witness this inequality. 2
26. 'Democracy leads to peaceful and harmonious life among citizens in every sphere.' Support this statement with suitable arguments. 3
- 27A. 'Political parties play a significant role in the effective working of a democracy.' Explain. 5

OR

- 27B. 'The challenge of dynastic succession is undoubtedly a major challenge for political parties in India.' Analyse the statement'. 4

28. **Read the given text and answer the following questions:(1+1+2=4)** 4

Sri Lanka emerged as an independent country in 1948. The leaders of the Sinhala community sought to secure dominance over government by virtue of their majority. As a result, the democratically elected government adopted a series of MAJORITARIAN measures to establish Sinhala supremacy. Over the years, it created feelings of alienation among the Sri Lankan Tamils. They felt that none of the major political parties led by the Buddhist Sinhala leaders was sensitive to their language and culture. As a result, the relations between the Sinhala and Tamil communities strained over time. On the other hand, the Belgian leaders took a different path. They recognised the existence of regional differences and cultural diversities. Between 1970 and 1993, they amended their constitution four times to work out an arrangement that would enable everyone to live together within the same country.

Source-Adapted from Power Sharing, NCERT

28. 1 State any two demands of Tamils in Sri Lanka.
28. 2 State the results of the Majoritarian Government in Sri Lanka.
28. 3 Explain any two provisions of the Belgian model of power sharing.

SECTION D ECONOMICS (20 marks)

29. Underemployment is caused when - 1
- A. More workers are employed than actually required
- B. Fewer workers are employed than actually required
- C. Workers are paid more than their actual output
- D. Jobs are given only to highly educated workers

- 30.** What can be inferred about the limitations of using per capita income (average income) to compare well-being across countries? Choose the correct option as the answer. **1**
- A. It shows how equally or unequally income is distributed among the people in a country.
 - B. The only measure needed to understand a country's development is Per capita income.
 - C. It gives a basic idea of economic well-being but hides the income inequality.
 - D. It only reflects the industrial growth of a country and does not consider other important factors.
- 31.** Which of the following examples best demonstrates how the tertiary sector supports both the primary and secondary sectors? **1**
- A. Farmers grow vegetables and sell them directly to consumers, with no transportation or storage involved.
 - B. A factory makes shoes and uses raw materials like leather to create the product, relying on transport and retail stores to distribute the shoes.
 - C. A bakery bakes bread and uses delivery services to send the bread to local shops for sale, without any direct involvement of raw materials.
 - D. A company produces furniture from wood, but does not require any transport or retail services to sell the product.
- 32.** Which one of the following issues currency notes in India? **1**
- A. Finance Ministry.
 - B. Reserve Bank of India.
 - C. State Bank of India.
 - D. Central Bank of India.
- 33.** Person Z tries to explain how the requirement of a double coincidence of wants in a barter system limits trade and exchange. Which of the following justification do you think will be used by him/her? **1**
- A. It makes trade more complicated, as each person must have what the other person wants, limiting the pool of potential trade partners.
 - B. The barter system allows trade to be conducted more efficiently since both parties already know what they need from the transaction.
 - C. It increases the number of exchanges because each person can trade for exactly what they want.
 - D. The system creates value for goods by ensuring that both parties have a direct need for each other's goods.

- 34.** Recognize and choose the option that correctly matches the effects and consequent outcomes of globalization. **1**

Column A (Effects of globalisation)	Column B (Outcomes)
1.Increased foreign investment	i. Expansion of global markets and access to technology
2.Cultural exchange and awareness	ii. Loss of traditional jobs due to automation and cheaper labor elsewhere
3.Techonological exchange and awareness	iii. Spread of cultural practices, ideas, and values across borders
4.Growth of multinational corporations	iv. Large companies becoming dominant players in global markets

Choose the correct option:

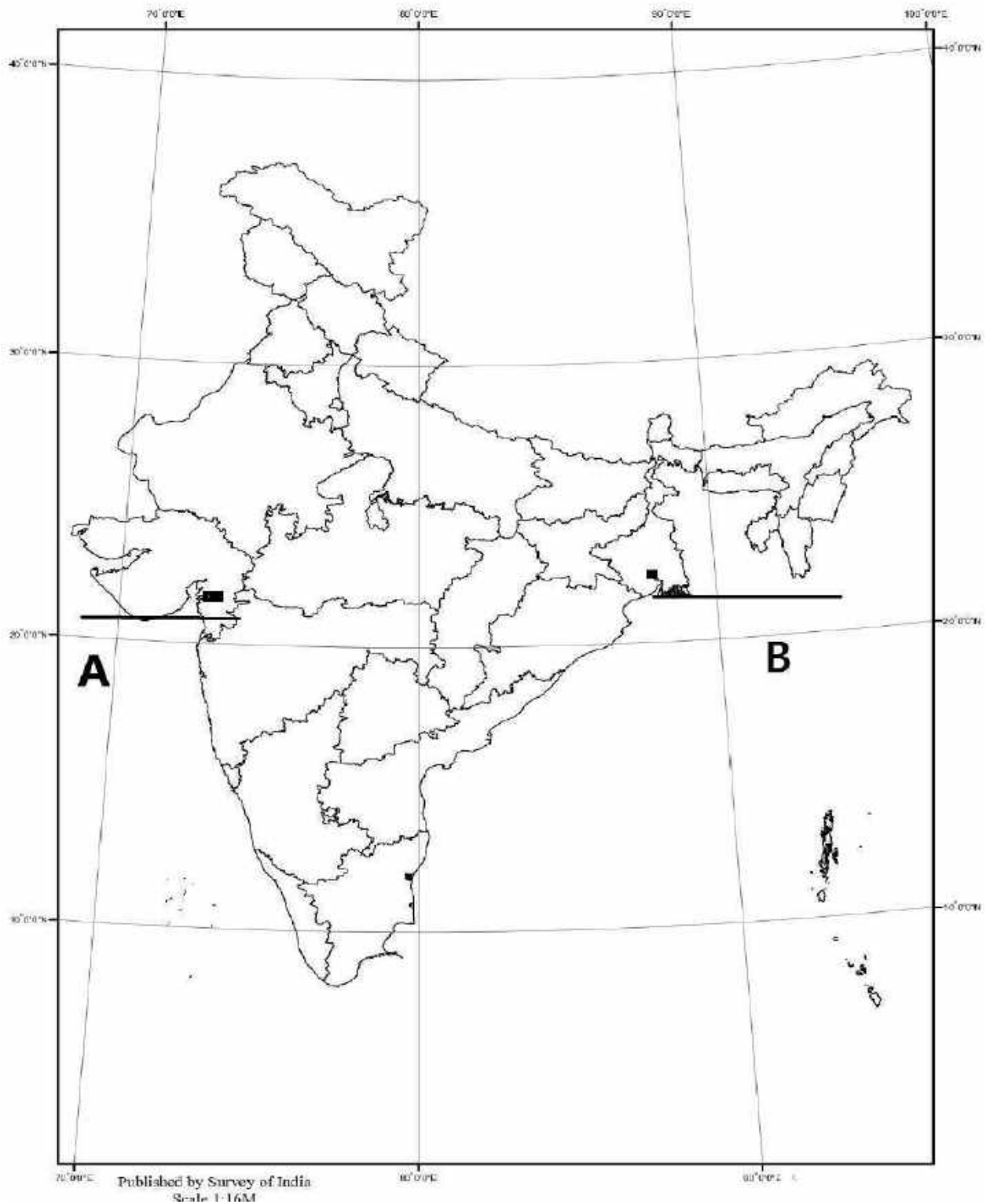
- A. 1-iii, 2-ii, 3-i, 4-iv
 B. 1-iv, 2-ii, 3-i, 4-iii
 C. 1-ii, 2-iv, 3-iii, 4-i
 D. 1-i, 2-iii, 3-ii, 4-iv

- 35.** Evaluate the utility of public services in contributing to the overall well-being of individuals and society. **3**
- 36.** 'Expanding access to loans in the formal sector is important, yet it is equally critical that these loans are accessible to all people for national development.' Justify the statement. **3**
- 37.** Highlight the significant three factors that have contributed to the growth of globalisation. **3**
- 38A.** A research student spoke with two people, M and N to learn about their work-related differences. On the basis of the interview conducted with both of them, the student concludes that while person M was working in an organized sector, person N was an employee of a workplace that was functioning in an unorganised way. Analyse the key differences between the two sectors that must have enabled the research student to come to this conclusion. **5**

OR

- 38B.** Privatisation can have both positive and negative effects on the economy. Support the statement with argument.

Map for Q. no. 9 (Section A) & Q. no. 19 (Section B)



MARKING SCHEME
SOCIAL SCIENCE (087)
CLASS-X (2025-26)

Time Allowed: 3hrs

Max. Marks:80

	SECTION A HISTORY (20 marks)	
1	1- A-4, B-1, C-2, D-3	1
2	B- Bal Gangadhar Tilak V.I candidates – B - To return to Council Politics	1
3	A - Widespread poverty and deadly diseases	1
4	B - Absolutist institutions like monarchy and church	1
5A.	1. Chinese pottery, textiles and spices from India and Southeast Asia also travelled the same route. In return, precious metals - gold and silver - flowed from Europe to Asia. 2. Trade and cultural exchange went hand in hand. Buddhism from India spread in several directions through intersecting points on the silk routes. 3. Early Christian missionaries travelled this route to reach Asia and Muslim preachers took the same route a few centuries later. (Any 2 points)	2
	OR	
5B.	1. Sometimes new crops like potatoes could make the difference between life and death. It was with the introduction of the humble potato that Europe's poor began to eat well, eat better and live longer. 2. Ireland's poor peasants became so dependent on potatoes that when the potato crop was destroyed by disease in the mid-1840s, hundreds of thousands of peasants died of starvation	
6A.	1. Figure or Image – The identity of India came to be visually associated with the image of Bharat Mata. This image was created by Bankim Chandra Chattopadhyay. Rabindranath Tagore painted his famous image of Bharat Mata. In this painting, Bharat Mata is portrayed as an ascetic figure; she is calm, composed, divine and spiritual. 2. Songs – Bankim Chandra Chattopadhyay wrote 'VandeMataram' as a hymn to the motherland. It was included in his novel Anandmath and widely sung during the Swadeshi Movement in Bengal. 3. Folklore – Indian folklore was revived. In late-nineteenth-century India, nationalists began recording folk tales sung by bards and they toured villages to gather folk songs and legends. These tales gave a true picture of traditional culture. It helped to restore a sense of pride in our past. In Bengal, Rabindranath Tagore himself began collecting ballads, nursery rhymes and myths, and led the movement	3

	<p>for folk revival. In Madras, Natesa Sastri published a massive four-volume collection of Tamil folk tales, The Folklore of Southern India.</p> <p>4.– Flag (A). During the Swadeshi movement in Bengal, a tricolour flag (red, green and yellow) was designed. It had eight lotuses representing eight provinces of British India, and a crescent moon, representing Hindus and Muslims.</p> <p>(B). By 1921, Gandhiji had designed the Swaraj flag. It was again a tricolour (red, green and white) and had a spinning wheel in the centre, representing the Gandhian ideal of self-help. Carrying the flag, holding it aloft, during marches became a symbol of defiance.</p> <p>5. Re – interpretation of History – Indians began looking into the past to discover India's great achievements. They wrote about art and architecture, Science and Maths, religion and culture, law, philosophy etc. Indians were asked to take pride in India's great achievements in the past and struggle to change the miserable conditions of life under British rule. (Any three points to be considered)</p>	
	OR	
6B.	<ol style="list-style-type: none"> 1. Salt became an effective tool of resistance against colonialism because of the following reasons: Gandhiji found in salt a powerful bond that would unite the nations as it – was consumed by all rich and poor alike. 2. Gandhiji's letter to Viceroy Irwin stated eleven demands. Most of them were of general interest but the most stirring was to abolish the salt tax imposed by the colonial government. 3. Irwin's unwillingness to negotiate forced Gandhiji to start his salt March which was joined by thousands. It developed the feeling of nationalism. 4. People in different parts of the country broke salt law and manufactured salt and demonstrated in front of government salt factories. 5. People unitedly followed Gandhiji's words. They refused to pay taxes, revenues, picketed liquor shops, boycotted foreign clothes, resigned from government jobs and violated forest laws. (Any three points to be considered)] 	
7A.	<ol style="list-style-type: none"> 1. In Britain the formation of the nation-state was not the result of a sudden upheaval or revolution. The primary identities of the people who inhabited the British Isles were ethnic ones - such as English, Welsh, Scot or Irish. 2. The Act of Union (1707) between England and Scotland resulted in the formation of the 'United Kingdom of Great Britain' meant that England was able to impose its influence on Scotland. Scotland's distinctive culture and political institutions were systematically suppressed. 3. The Scottish Highlanders were forbidden to speak their Gaelic language or wear their national dress and large numbers were forcibly driven out of their homeland. 4. The English helped the Protestants of Ireland to establish their dominance over a largely Catholic country. Catholic revolts against British dominance were suppressed. Ireland was forcibly incorporated into the United Kingdom in 1801. 5. The symbols of the new Britain - the British flag, the national anthem, the English language were actively promoted and the older nations survived only as subordinate partners in this union. 	5
	OR	

7B	<ol style="list-style-type: none"> 1. The Bourbon dynasty, which had been deposed during the French Revolution, was restored to power, and France lost the territories it had annexed under Napoleon. 2. A series of states were set up on the boundaries of France to prevent French expansion in future. Thus the kingdom of the Netherlands, which included Belgium, was set up in the north and Genoa was added to Piedmont in the south. 3. Prussia was given important new territories on its western frontiers, while Austria was given control of northern Italy. 4. The German confederation of 39 states that had been set up by Napoleon was left untouched. In the east, Russia was given part of Poland while Prussia was given a portion of Saxony. 5. The main intention was to restore the monarchies that had been overthrown by Napoleon, and create a new conservative order in Europe. 	
8.	<p>8.1 Krishnaji wanted to publish significant information about societal developments in the areas of politics, science, and other fields in order to inform the public.</p> <p>8.2 The media used to criticise and analyse government policies were local newspapers and political organisations. As a result, both of these served as the government's opposition.</p> <p>8.3 Reasons for popularity of newspapers during 19th century are:</p> <ol style="list-style-type: none"> i. The political developments in the country began to interest a sizable portion of society, and this information was skillfully presented in the newspapers. ii. Newspapers started to serve as a source for societal advancements in social, cultural, and scientific 	(1+1+2=4)
9.	<p>Marked on the map.</p> <p>(Answers to the questions for the V.I candidates are also the same-though only naming of the locations is required.)</p>	(1+1=2)
	SECTION B GEOGRAPHY (20 marks)	
10.	C - echnological development and institutional changes.	1
11.	D - Black soil & Laterite soil.	1
12.	A. Reduction in the prey species leading to the tiger's dwindling food supp	1
13.	A - These states have a significant portion of forests managed as reserved or protected forests for conservation.	1
14.	D – Tamil Nadu	1
15.	B - To provide better irrigation systems and sustainable water conservation practices for farmers.	1
16.	<p>Climate and Irrigation:</p> <ul style="list-style-type: none"> • Haryana and Punjab have a well-developed irrigation system (e.g., canal irrigation from the Sutlej-Yamuna Link Canal), which allows for large-scale 	2

	<p>commercial cultivation of rice. The climate is suitable for high-yielding varieties, and irrigation ensures water availability.</p> <ul style="list-style-type: none"> • In contrast, Odisha has a more monsoonal climate, and while rice is grown, the farming is often rainfed and primarily for local consumption. The lack of large-scale irrigation systems limits its commercialization. <p>Economic Factors (Market Access):</p> <ul style="list-style-type: none"> • In Punjab and Haryana, rice is grown for commercial purposes to meet national and international demand. The proximity to markets, government procurement systems, and well-developed transport networks enable these states to export surplus rice. • In Odisha, rice is mostly grown for personal or local use, with less access to large markets for profit-driven farming, making it a subsistence crop. <p>Farming Practices:</p> <ul style="list-style-type: none"> • In Punjab and Haryana, the use of modern farming techniques, machinery, and high-yielding varieties supports commercial rice cultivation. • In Odisha, rice farming is more traditional and focused on family sustenance rather than large-scale production, which reflects the subsistence nature of cultivation. <p>Or any other relevant point(s) (Any 2 point to be considered out of which at least one should be related to climate and one economic)</p>	
17A.	<p>1. Odisha was the largest bauxite producing state in India in 2016-17. Panchpatmali deposits in Koraput district are the most important bauxite deposits in the state.</p> <p>2. Aluminium is an important metal because it combines the strength of metals such as iron,</p> <p>3. It is a good alternative to other metals due to its extreme lightness and</p> <p>4. also has good conductivity and</p> <p>5. great malleability (any other relevant point - 5 points)</p>	5
	OR	
17B.	<p>Significance:</p> <ul style="list-style-type: none"> -It is used for power generation, -To supply energy to industry as well as for domestic needs. -India is highly dependent on coal for meeting its commercial energy requirements.e.g., in metallurgy - any other relevant point (at least 2) <p>Variety of coal types-</p> <p>Coal, is found in a variety of forms depending on the degrees of compression and the depth and time of burial.</p>	

	<p>1. Peat - Decaying plants in swamps produce peat. Which has a low carbon and high moisture contents and low heating capacity.</p> <p>2. Lignite - is a low grade brown coal, which is soft with high moisture content. The principal lignite reserves are in Neyveli in Tamil Nadu and are used for generation of electricity.</p> <p>3. Bituminous coal-Coal that has been buried deep and subjected to increased temperatures. It is the most popular coal in commercial use. Metallurgical coal is high grade bituminous coal which has a special value for smelting iron in blast furnaces.</p> <p>4. Anthracite -is the highest quality hard coal.</p>	
18.	<p>18.1 Due to intensive material production and consumption.</p> <p>18.2 Manufacturing industries are a major cause for-</p> <p>1) air pollution – Smoke is emitted by chemical and paper factories, brick kilns, refineries and smelting plants, and burning of fossil fuels in big and small factories that ignore pollution norms. Toxic gas leaks can be very hazardous with long-term effects.</p> <p>2) Water pollution is caused by organic and inorganic industrial wastes and effluents discharged into rivers. The main culprits in this regard are paper, pulp, chemical, textile and dyeing, petroleum refineries, tanneries and electroplating industries that let out dyes, detergents, acids, salts and heavy metals like lead and mercury pesticides, fertilisers, synthetic chemicals with carbon, plastics and rubber, etc. into the water bodies.</p> <p>3) Thermal pollution of water occurs when hot water from factories and thermal plants is drained into rivers and ponds before cooling.</p> <p>4) Dumping of wastes specially glass, harmful chemicals, industrial effluents, packaging, salts and garbage renders the soil useless.</p> <p>5) Rain water percolates to the soil carrying the pollutants to the ground and the ground water also gets contaminated.</p> <p>6) Industrial and construction activities, machinery, factory equipment, generators, saws and pneumatic and electric drills also make a lot of noise. (Or any other relevant point) – Any two points</p> <p>18.3 Poor people, cannot afford to protect themselves from the negative impacts of pollution, end up suffering the most. This also leads to social disparity/inequality due to the ill effects of poverty. (Can be explained with the help of an example)</p>	(1+2+1=4)
19.	<p>Marked on the map.</p> <p>(Answers to the questions for the V.I candidates are also the same-though only naming of the locations is required.)</p>	(1+2=3)
	<p style="text-align: center;">SECTION C POLITICAL SCIENCE (20 marks)</p>	
20.	A- I and II	1
21.	<p>A – Coalition Government.</p> <p>V.I candidates – D. II and III</p>	1

22.	B - No, because Currency is a subject of Union List	1
23.	A - Both A and R are true, and R is the correct explanation of A.	1
24.	<p>Features of federalism:</p> <ol style="list-style-type: none"> 1. There are two or more levels (or tiers) of government. 2. Different tiers of government govern the same citizens, but each tier has its own jurisdiction in specific matters of legislation, taxation and administration. 3. The jurisdictions of the respective levels or tiers of government are specified in the constitution. So the existence and authority of each tier of government is constitutionally guaranteed. 4. The fundamental provisions of the constitution cannot be unilaterally changed by one level of government. Such changes require the consent of both the levels of government. 5. Courts have the power to interpret the constitution and the powers of different levels of government. The highest court acts as an umpire if disputes arise between different levels of government in the exercise of their respective powers. 6. Sources of revenue for each level of government are clearly specified to ensure its financial autonomy. 7. The federal system thus has dual objectives: to safeguard and promote unity of the country, while at the same time accommodate regional diversity. Therefore, two aspects are crucial for the institutions and practice of federalism. Governments at different levels should agree to some rules of power sharing. They should also trust that each would abide by its part of the agreement. An ideal federal system has both aspects: mutual trust and agreement to live together. (Any two point to be considered) 	2
25.	<p>1. Education – Literacy rate among women is only 54% as compared with 76% among men. Parents prefer to spend their resources for their sons' education rather than daughters.</p> <p>2. Low Proportion of women in highly paid and valued jobs – Women still have a small share in the highly paid jobs. Even if a woman works for more hours than a man, her work is not given importance. This results in low paid and low valued jobs for women.</p> <p>3. Women are paid less than men – Despite the Equal Wages of Act women are paid less than men, even when both do exactly the same work.</p> <p>4. Preference for Son – In many parts of India parents prefer to have sons and find ways to have the girl child aborted before she is born. This has led to decline in child sex – ratio (927)</p> <p>5. Exploitation at workplace and domestic violence – Women are exploited and harassed at the workplace. They have to face different forms of domestic violence at home. (Any 2 point to be considered)</p>	2

26.	<p>1. Democracies accommodate various social divisions. For example, Belgium has peacefully solved her ethnic problems and solved the differences.</p> <p>2. All democracies usually develop a procedure to conduct competition, i.e. conduct elections, power-sharing, etc. This reduces the possibility of tensions, due to social divisions, turning violent or explosive.</p> <p>3. Democracy teaches people to respect the differences and resolve conflicts among different groups peacefully. In non-democratic countries, rulers either turn a blind eye to or suppress internal differences. For example, Sri Lanka. The plus point in democratic regime is the ability to handle social differences, divisions and conflicts.</p> <p>4. A democracy is not just a rule by majority opinion. The majority always needs to work with the minority so that the government represents the general view.</p> <p>5. A democratic government ensures that the rule by the majority does not become autocratic in terms of religion, race or linguistic group etc. It tries to show that in every election, different persons and groups can form a majority. It tries to see that every citizen has a chance to be in majority at some point of time and is not barred on the basis of birth. All these things ensured by a democratic regime lead to a peaceful and harmonious life. (Any three points to be considered)</p>	3
27A	<p>Political parties play a significant role in the effective working of a democracy. To fill political offices and exercise political power, political parties are needed to perform a series of functions, which are the following</p> <ol style="list-style-type: none"> 1. Parties contest elections. Elections are fought mainly among candidates put up by political parties. In India, top party leaders choose candidates for contesting elections. 2. Parties put forward different policies and programmes. Political parties in a democracy group together similar opinions, to provide a direction in which government policies can be formulated. 3. Parties make laws for a country. Laws are debated and passed in the legislature. 4. Parties that lose elections play the role of the opposition. Opposition parties voice their views by criticizing the government for its failure or wrong policies. 5. Parties shape public opinion. They raise and highlight issues and resolve people's problems. Many pressure groups are the extensions of political parties. 6. Parties provide people access to government machinery and welfare schemes. For an ordinary citizen it is easier to approach a local party leader than a government officer. (Any 5 points) 	5
	OR	
27B	<ol style="list-style-type: none"> 1. Most political parties do not practice open and transparent procedures for their functioning. So there are very few ways for an ordinary worker to rise to the top in a party. 2. Those who happen to be the leaders are in a position of unfair advantage as they favour people close to them or even their family members. 3. In many parties in India, we see a trend of dynastic succession. The top positions are always controlled by members of a particular family, which is unfair to other 	

	<p>members of the party, and bad for democracy.</p> <p>4. This is so because people who do not have adequate experience or popular support come to occupy positions of power.</p> <p>5. More than loyalty to party principles and policies, personal loyalty to the leader becomes more important. This tendency is seen all over the world, even in older democracies.</p>	
28.	<p>28.1-</p> <p>(a) To recognise Tamil as official language</p> <p>(b) Regional autonomy</p> <p>(c) Equality of opportunities in securing education and jobs.</p> <p>(Any one to be considered)</p> <p>28.2- The Majoritarian Government in Sri Lanka created a distrust between Tamils and Sinhala communities which resulted in civil war. As a result, thousands of people of both communities were killed and many families were forced to leave the country as refugees.</p> <p>28.3</p> <p>1. The Constitution prescribed that the number of Dutch and French Any two speaking ministers shall be equal in the central government. Some special laws require the support of majority of members from each linguistic group. Thus, no single community can make decisions unilaterally.</p> <p>2. Many powers of the central government have been given to state governments of the two regions of the country. The state governments are not subordinate to the Central Government.</p> <p>3. Brussels has a separate government in which Dutch and French have equal representation.</p> <p>4. Apart from the Central and the State Government, there is a third kind of Government. This 'community government' is elected by people belonging to one language community - Dutch, French and German - speaking - no matter where they live. This government has the power regarding cultural, educational and language - related issues. (Any two to be considered)</p>	(1+1+2=4)
	<p>SECTION D</p> <p>ECONOMICS (20 marks)</p>	
29.	A - More workers are employed than actually required	1
30.	C - It gives a basic idea of economic well-being but hides the income inequality, cost of living, or access to essential services.	1
31.	B - A factory makes shoes and uses raw materials like leather to create the product, relying on transport and retail stores to distribute the shoes.	1

32.	B – Reserve Bank of India	1
33.	A - It makes trade more complicated, as each person must have what the other person wants, limiting the pool of potential trade partners.	1
34.	D - 1-i, 2-iii, 3-ii, 4-iv	1
35.	<p>Healthcare and Public Health:</p> <ul style="list-style-type: none"> • Accessible and quality public healthcare, is fundamental for maintaining, a productive and healthy population. It reduces mortality rates, ensures the well-being of the workforce, and allows individuals to contribute meaningfully to the economy. Inadequate healthcare can result in a higher burden of disease, lower life expectancy, and economic inefficiencies. <p>Education and Skill Development:</p> <ul style="list-style-type: none"> • Public education systems are essential for providing equal learning opportunities to all citizens, regardless of socioeconomic status. A well-educated population leads to increased literacy rates, skill development, and innovation, all of which are crucial for economic growth, reducing inequality, and fostering social cohesion. <p>Sanitation and Clean Water:</p> <ul style="list-style-type: none"> • Proper sanitation and access to clean water are vital for maintaining public health and preventing diseases such as cholera and dysentery. These services significantly improve life expectancy, reduce healthcare costs, and increase productivity, especially in rural or underserved areas. <p>Infrastructure Development:</p> <ul style="list-style-type: none"> • Public infrastructure, including roads, transportation, and energy, supports the functioning of markets, businesses, and industries. It enhances connectivity, stimulates economic activities, and improves the quality of life for individuals by providing easy access to essential goods and services. <p>Or any other relevant point(s) - Any two</p>	<p>1 ½ + 1 ½ =3</p>
36.	<p>- Higher cost of borrowing from informal sources means a larger part of the earnings of the borrowers is used to repay the loan. Hence, borrowers have less income left for themselves (as we saw for Shyamal in Sonpur).</p> <p>- In certain cases, the high interest rate for borrowing can mean that the amount to be repaid is greater than the income of the borrower. -This could lead to increasing debt (as we saw for Rama in Sonpur) and debt trap.</p> <p>-Also, people who might wish to start an enterprise by borrowing may not do so because of the high cost of borrowing.</p> <p>-For these reasons, banks and cooperative societies need to lend more. This would lead to higher incomes and many people could then borrow cheaply for a variety of needs.</p> <p>-They could grow crops, do business, set up small-scale industries etc. They could set up new industries or trade in goods. Cheap and affordable credit is crucial for</p>	3

	the country's development -Or any other relevant point(s) - Any 3	
37.	1. the movements of goods and services, 2. information and communication technology 3. Transportation technology 4. movement of people between countries 5. Liberalisation of foreign trade and foreign investment policy Any other relevant point (any 3 well explained)	3
38A.	<p>Working conditions of person M would have the following features:</p> <p>Regular Employment: Workers have assured, regular work with fixed terms of employment.</p> <p>Government Regulation: Enterprises are registered with the government and follow legal rules and regulations (e.g., Factories Act, Minimum Wages Act).</p> <p>Security of Employment: Workers enjoy job security with clear working hours and benefits.</p> <p>Overtime Compensation: If workers work beyond regular hours, they are paid overtime.</p> <p>Employee Benefits: Workers receive benefits like paid leave, holidays, provident fund, gratuity, and medical benefits.</p> <p>Safe Working Conditions: Employers are required to provide safe working environments (e.g., clean drinking water).</p> <p>Retirement Benefits: Workers are entitled to pensions after retirement.</p> <p>Formal Processes: The sector follows formal processes and procedures for employment.</p> <p>Working conditions of person N would have the following features:</p> <p>Irregular Employment: Jobs are low-paid and often irregular, with no guarantee of continuous work.</p> <p>Lack of Government Regulation: The sector operates largely outside government control, with few or no legal protections.</p> <p>No Employee Benefits: Workers do not receive benefits like paid leave, overtime pay, or medical benefits.</p> <p>Job Insecurity: Employment is not secure; workers can be dismissed without notice or reason.</p> <p>Seasonal Work: Employment is often dependent on seasons, and workers may be laid off during off-peak periods.</p> <p>Informal Jobs: Many workers are self-employed, doing small jobs like street vending or repair work.</p> <p>Dependence on Employer: Employment conditions are influenced by the employer's whims and needs.</p> <p>No Legal Protections: There is little enforcement of rules or regulations related to working conditions or benefits.</p>	5
	OR	
38B.	Privatization: Positive Effects- 1. Increased Efficiency and Productivity	

2. Improved Quality of Services
3. Reduced Government Burden
4. Any other relevant point(s)

Privatization: Negative Effects-

1. Exclusion of Public Welfare - Profit being the only motive
2. Loss of Employment Security
3. Wide gap between rich and poor - due to inaccessibility of basic facilities
4. Lower government accountability
5. Any other relevant point(s)

(ANY 5 points to be accepted. However, at least 2 positive and 2 negative effects must be included in the response)

Map for Q. no. 9 (Section A) & Q. no. 19 (Section B)

