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

कक्षा X / CLASS - X

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

General Instructions:

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

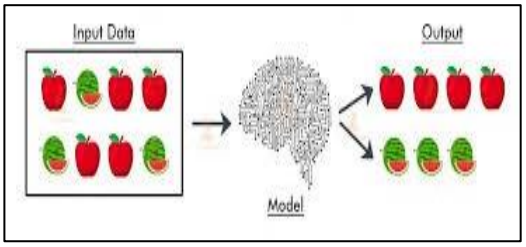
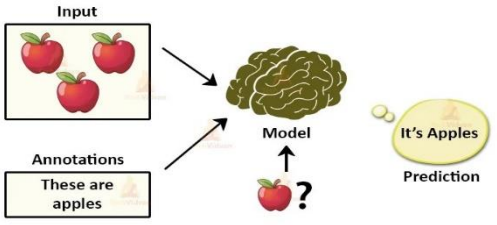
SECTION A: OBJECTIVE TYPE QUESTIONS

Q. 1	**Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**	
i.	During a school project, the printer stops working just before submission. Ria quickly emails the file to a nearby shop to print it there. This action shows she is: A) Resourceful B) Careless C) Impatient D) Dependent	1
ii.	Which of the following is NOT one of the 17 Sustainable Development Goals? A) No Poverty B) Zero Hunger C) Space Research D) Climate Action	1
iii.	What is one way to mitigate hazards associated with prolonged computer use? (A) Increasing screen brightness (B) Using a smaller screen (C) Sitting in a fixed position (D) Stretching at regular intervals or doing simple yoga	1
iv.	Assertion (A): Effective communication is crucial for resolving conflicts and building strong relationships. Reason (R): Communication provides a clear and open channel for expressing thoughts, feelings, and ideas, allowing for mutual understanding. (A) Both A and R are correct and R is the correct explanation of A (B) Both A and R are correct but R is not the correct explanation of A (C) A is correct but R is not correct (D) A is not correct but R is correct.	1
v.	Priya tends to avoid risk and prefers stability in decision-making processes. Rahul demonstrates a fixed mindset, often resisting change or new approaches. Kavita showcases adaptability, readily embracing changes and new ideas. Arjun is risk — averse and avoids any initiatives that might challenge the status quo. Among above individuals, whose approach aligns more with the qualities typically associated with a successful entrepreneur ? A) Priya B) Rahul C) Kavita D) Arjun	1

vi.	Which of these is an example of cloud-based ICT service? A) Google Drive B) Local pen drive C) Hard disk D) Printed textbook	1

Q. 2	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**	
i	What is the purpose of defining the problem statement during the Problem Scoping stage in an AI project cycle? A) To collect data B) To understand the aim and objective of the project C) To train the model D) To process data	1
ii	What is the primary domain of application for Bioethics? A) Agriculture B) Healthcare and life sciences C) Information technology D) Environmental conservation	1
iii	Discover and group similar patterns within unlabeled data is the primary objective of ___ A) Regression B) Classification C) Clustering D) Dimensionality Reduction	1
iv	Which of the following AI domain collects data, maintain the datasets, and derives the meaning out of it? A) Data Science B) Computer Vision C) NLP D) None of the above	1
v.	When both predicted and actual value is negative for an AI model, then it is the case of- A) True Positive B) True Negative C) False Positive D) False Negative	1
vi.	Sometimes, you use the internet and try to acquire data for your project from some random websites. Such data might not be authentic as its accuracy cannot be proved. Due to this, it becomes necessary to find a _____. A) Reliable source B) Random source C) Unauthorize source D) All of the above	1
Q. 3	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**	
i.	During data acquisition, feeding previous data into machine is called- A) Training data B) Predicting data C) Testing data D) Evaluation data	1
ii.	Which of the following is an example of unstructured data? A) Customer records in a spreadsheet B) Financial data in a database table C) Images, audio, and video files D) Sales figures in a data warehouse	1
iii.	Which algorithms result in two things, a vocabulary of words and frequency of the words in the corpus? A) Sentence segmentation B) Tokenisation C) Bag of words D) Text normalisation	1
iv.	The Confusion Matrix is used to record the comparison between: A) Problem Scoping and Data Acquisition B) Prediction and Reality C) Training Data and Test Data D) Hidden Layers and Output Layers	1
v.	Common computer vision tasks are- A) Classification B) Localization C) Image segmentation D) All of them	1
vi.	Which NLP technique is used to remove common words like "the," "is," and "and"? A) Lemmatization B) Tokenization C) Stop word removal D) Stemming	1
Q. 4	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**	

i.	In an RGB image, what does a pixel with an intensity value of 0 represent? A) Full presence of color B) No presence of color C) Maximum brightness level D) Minimum brightness level	1
ii.	When is a neural network model most suitable? A) For small datasets that are easy to analyze. B) For problems that have a straightforward, logical solution. C) For problems with large and complex datasets, such as image recognition. D) For simple arithmetic calculations.	1
iii.	In which approach does an AI model rely on pre-defined rules set by the developer? A) Learning-based approach B) Supervised approach C) Rule-based approach D) Reinforcement approach	1
iv.	What is the most common way a computer stores a colored image? A) By storing it as a grayscale image. B) By storing it as a single pixel C) By storing only the most important parts of the image. D) By breaking it down into three channels: Red, Green, and Blue.	1
v.	How low accuracy impact AI in health care? A) It increases fairness in patients' treatment B) It improves AI efficiency C) It makes doctors rely more on AI D) It can lead to wrong diagnosis and incorrect treatment	1
vi.	Natural Language Generation does not involve …….. A) Text analyzing B) Text planning C) Sentence planning D) Text realization	1
Q. 5	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**	
i.	Which of the following is an application of NLP? A) Automatic Text Summarisation B) Virtual Assistants C) Machine Translation D) All of the above	1
ii.	The words in a sentence are analysed for grammar. Words are arranged in a manner that shows the relationship among them. The following sentence is rejected by this analyser: "The market goes to girl". This is an example of: A) Lexical Analysis B) Syntactic Analysis C) Semantic Analysis D) Pragmatic Analysis	1
iii.	TFIDF is a statistical measure that evaluates the importance of a word to a document in a corpus. (True/False)	1
iv.	Which of the following statements is true? (i) The value of Precision ranges from 0 to 1. (ii) The value of F1 score ranges from 0 to 1. A) Only (i) B) Only (ii) C) Both (i) and (ii) D) Neither (i) nor (ii)	1
v	Assertion (A): In supervised learning, the training data contains both inputs and their corresponding outputs. Reason (R): Supervised learning algorithms predict outputs based on labelled examples (A) Both A and R are correct and R is the correct explanation of A (B) Both A and R are correct but R is not the correct explanation of A (C) A is correct but R is not correct (D) A is not correct but R is correct.	1
vi	Consider a spam detection model. A legitimate email incorrectly flagged as spam would be A) True Positive B) True Negative	

	C) False Positive D) False Negative	
	SECTION B: SUBJECTIVE TYPE QUESTIONS **Answer any 3 out of the given 5 questions (2 x 3 = 6 marks)** **Answer each question in 20 – 30 words.**	
Q. 6	Write two ways of effective Time Management.	2
Q. 7	How does adopting renewable energy in industries promote green skills?	2
Q. 8	How does entrepreneurship help in wealth creation and development in a certain area?	2
Q. 9	Write any two ways to overcome barriers to effective communication.	2
Q. 10	Explain how cloud storage is more beneficial compared to traditional storage devices.	2
Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)		
Q. 11	Differentiate between chatbot and virtual assistant with examples.	2
Q. 12	"Any image has pixels and resolution". Justify the statement.	2
Q. 13	A company develops an AI system to analyze job applications. After deployment, it was found that the system favored male candidates more than female candidates. Identify the ethical issue in this case.	2
Q. 14	Give 4 principles of Bio Ethics framework.	2
Q. 15	Aman is confused with the Terms True Negative and False Positive. Briefly differentiate between the two terms.	2
Q. 16	What is the purpose of defining the problem statement during the Problem Scoping stage in an AI project cycle?	2
Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)		
Q. 17	Categorise the following examples under the given three AI domains Data Science, NLP and Computer Vision with justification: A) Speech-to-text transcription B) Fraud detection in banking C) Object detection in surveillance cameras D) Sentiment analysis of product reviews	4
Q.18	Identify and explain the types of the learning-based approaches in the figures given below  Figure 1  Figure 2	4

<table>
<tr><td>Q. 19</td><td>Neural networks are said to be modelled the way how neurons in the human brain behave. A similar system is mimicked by the AI machine to perform certain tasks. Briefly describe neural network and the layers of neural network.</td><td>4</td></tr>
<tr><td>Q. 20</td><td>Normalize the Text in the following Document.
Document 1: Ankit and Vineet are best friends.
Document 2: Ankit likes to play football but Vineet prefers to play indoor games.</td><td>4</td></tr>
<tr><td>Q.21</td><td>A real estate company has created an AI model, which predicts the selling and purchasing of houses in a given city. During the testing process, the AI model came up with the following predictions:
<table>
<tr><td colspan="2" rowspan="2">Confusion Matrix</td><td colspan="2">Reality</td></tr>
<tr><td>Yes</td><td>No</td></tr>
<tr><td rowspan="2">Predicted</td><td>Yes</td><td>64</td><td>22</td></tr>
<tr><td>No</td><td>06</td><td>08</td></tr>
</table>
i) How many total correct predictions were done by the machine in the above scenario?
ii) Calculate precision, recall, and F1 Score.</td><td>4</td></tr>
</table>

Kendriya Vidyalaya Sangathan

Pre Board Examination 2025-26

Marking Scheme Class X

Artificial Intelligence (417)

Question No	Answer	Marks
1 i	A	1
ii	C	1
iii	D	1
iv	A	1
v	C	1
vi	A	1
2 i	B	1
ii	B	1
iii	C	1
iv	A	1
v	B	1
vi	A	1
3 i	A	1
ii	C	1
iii	C	1
iv	B	1
v	D	1
vi	C	1
4 i	B	1
ii	C	1
iii	C	1
iv	D	1
v	D	1

<table>
<tr><td>vi</td><td>A</td><td>1</td></tr>
<tr><td>5 i</td><td>D</td><td>1</td></tr>
<tr><td>ii</td><td>B</td><td>1</td></tr>
<tr><td>iii</td><td>True</td><td>1</td></tr>
<tr><td>iv</td><td>C</td><td>1</td></tr>
<tr><td>v</td><td>A</td><td>1</td></tr>
<tr><td>vi</td><td>C</td><td>1</td></tr>
<tr><td>6</td><td>i Prioritize Tasks using a To-Do List
ii Make a daily or weekly list of all tasks.
iii Mark them as urgent, important, or less important.
iv Finish the most important work first to avoid last-minute stress.
v Create a Realistic Study Schedule</td><td>2 mark for any two correct answers</td></tr>
<tr><td>7</td><td>Using renewable energy like solar or wind reduces pollution, conserves resources, and promotes sustainability, showing eco-friendly practices aligned with green skills.</td><td>2 marks for correct answer</td></tr>
<tr><td>8</td><td>Entrepreneurship helps in wealth creation and development in a specific area by fostering innovation, creating jobs, attracting investment, and improving the overall standard of living.</td><td>1 mark for one correct answer</td></tr>
<tr><td>9</td><td>i Active listening:
Active listening is a communication technique that requires the listener to fully concentrate on, understand, respond to, and remember what is being said.
ii) Clarity helps reduce confusion and ensures your message is understood accurately and efficiently. By being direct and avoiding jargon, you make it easier for the receiver to process the information.</td><td>1 mark each for one correct answer</td></tr>
<tr><td>10</td><td>Accessibility Anytime, Anywhere
Automatic Backup and Recovery
Collaboration and Sharing
Cost Efficiency Over Time</td><td>1 mark each for one correct answer</td></tr>
<tr><td>11</td><td><table><tr><td>Feature</td><td>Chatbot</td><td>Virtual Assistant</td></tr><tr><td>Purpose</td><td>Quick text-based responses, simple tasks like FAQs.</td><td>Performs various tasks, understands complex commands, often voice-enabled.</td></tr></table></td><td>1 mark each for one difference.</td></tr>
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<tr><td></td><td>
<table>
<tr><td>Complexity</td><td>Follows predefined rules or scripts.</td><td>Uses advanced AI and natural language processing.</td></tr>
<tr><td>Interaction Mode</td><td>Mostly text-based chat.</td><td>Voice-based, text-based, or both.</td></tr>
<tr><td>Examples</td><td>Customer support chat on shopping websites, Pizza-ordering bots.</td><td>Google Assistant, Amazon Alexa, Apple Siri, Microsoft Cortana.</td></tr>
<tr><td>Capabilities</td><td>Answers questions, provides info, may redirect to human agent.</td><td>Sets reminders, controls smart devices, sends messages, makes calls, searches the web.</td></tr>
</table>
</td><td></td></tr>
<tr><td>12</td><td>Yes, any digital image consists of tiny colored squares called pixels, and the total number of these pixels defines the image's resolution. A higher pixel count, or higher resolution, means more detail and a sharper, clearer image, whereas a lower pixel count results in a less detailed and unclear image. Resolution is often expressed as a width and height in pixels, such as 1920x1080, and determines the image's quality and clarity on a screen or when printed. (2 marks for correct answer)</td><td>1 mark each for one correct answer</td></tr>
<tr><td>13</td><td>Ethical issue - Bias in AI model.
The system's gender bias led to an unfair hiring process that did not evaluate all candidates based solely on their qualifications. This deprived qualified female candidates of equal opportunities.
Discrimination: The AI actively discriminated against female candidates, which is a significant ethical and often legal violation.</td><td>1 marks for naming and describing,1 mark for description</td></tr>
<tr><td>14</td><td>Autonomy, beneficence, non-maleficence, and justice</td><td>1/2 marks for each correct principle</td></tr>
<tr><td>15</td><td>True Negative
is a result where a model or test correctly identifies the absence of a condition or a negative outcome. The model predicts "no," and the correct outcome is also "no."
False Positive is a result where the model incorrectly predicts a positive outcome when the actual outcome is negative. The model predicts "yes," but the correct outcome is "no." This is also known as a Type I error</td><td>2 marks for correct answer
1 mark for any 1 correct answer</td></tr>
<tr><td>16</td><td>The purpose of defining the problem statement during the Problem Scoping stage in an AI project cycle is</td><td>2 marks for correct answer</td></tr>
</table>

	to clearly identify the project's aim, objective, and boundaries. This sets the direction for the entire project, ensuring that all subsequent steps are focused and aligned with a common goal.	
17	A) NLP **Justification:** Speech-to-text transcription involves converting spoken language into written text. This falls under Natural Language Processing (NLP) as NLP deals with enabling computers to understand, interpret, and process human language in both speech and text formats. B) Fraud detection in banking - Data Science Fraud detection in banking involves analyzing vast amounts of transaction data, user behavior, and other financial activities to identify anomalies and potential fraud attempts. This is a core application of Data Science, which focuses on extracting insights from data sets using statistical methods, machine learning, and algorithms C) Object detection in surveillance cameras - Computer Vision Object detection in surveillance cameras focuses on enabling machines to "see" and interpret visual information from images and videos. This is the domain of Computer Vision, which uses deep learning and neural networks to recognize objects, people, and patterns with high accuracy. D) Sentiment analysis of product reviews - Natural Language Processing (NLP) Sentiment analysis of product reviews involves analyzing the text to determine the emotional tone or sentiment expressed by customers. NLP is used to analyze the text and extract the underlying sentiment.	2 marks for correct answer 1 mark each for one correct answer.
18	**Figure 1**: An unsupervised learning model works on unlabelled dataset. This means that the data which is fed to the machine is random and there is a possibility that the person who is training the model does not have any information regarding it. The unsupervised learning models are used to identify relationships, patterns and trends out of the data which is fed into it. It helps the user in understanding what the data is about and what are the major features identified by the machine in it. Here, images of a set of animals are fed into the AI model and the model clusters them based on similar features **Figure 2:** In a supervised learning model, the dataset which is fed to the machine is labelled. In other words, we can say that the dataset is known to the person who	4 marks for correct identification and difference 2 marks for only identification

	is training the machine only then he/she is able to label the data. A label is some information which can be used as a tag for data. Here, labelled images of apples are fed into the model and trained. The model correctly identifies the given input as Apple.	
19	Artificial Neural Networks (ANNs) are inspired by the way neurons in the human brain process information. They are made up of interconnected layers of "nodes" or "artificial neurons" i)Input layer:Data features (like numbers, images, or text representations) are fed into the input layer. Hidden Layers: The processing takes place. Output Layer: The final layer produces predictions, such as class labels (e.g., cat vs. dog) or a numerical value (for regression tasks). human brain behave.	4 marks for defining neural networks and all three components. 1 mark for each correct component
20	Steps of Normalization: 1. Lowercasing: Convert all letters to lowercase. 2. Removing Punctuation: Eliminate periods, commas, etc. 3. Tokenization: Split the text into individual words (tokens). 4. Stop Word Removal (optional): Remove very common words like 'and', 'to', 'are', 'but'. 5. Stemming/Lemmatization: Reduce words to their base or root form. Normalized Output: a) **Lowercasing & Punctuation Removal**: Doc 1 → ankit and vineet are best friends Doc 2 → ankit likes to play football but vineet prefers to play indoor games b) **Tokenization:** Doc 1 Tokens → ['ankit', 'and', 'vineet', 'are', 'best', 'friends'] Doc 2 Tokens → ['ankit', 'likes', 'to', 'play', 'football', 'but', 'vineet', 'prefers', 'to', 'play', 'indoor', 'games'] c) **Optional Stop-word Removal:** Doc 1 → ['ankit', 'vineet', 'best', 'friends']	1 mark each step.

	Doc 2 → ['ankit', 'likes', 'play', 'football', 'vineet', 'prefers', 'play', 'indoor', 'games'] d) **Stemming/Lemmatization:** Doc 1 → ['ankit', 'vineet', 'best', 'friend'] Doc 2 → ['ankit', 'like', 'play', 'football', 'vineet', 'prefer', 'play', 'indoor', 'game'] **Final Normalized Text:** Document 1: ankit vineet best friend Document 2: ankit like play football vineet prefer play indoor game	
21	i) Correct Prediction 72 ii) Recall =TP/TP+FN= 64/64+6=0.91 Precision=TP/TP+FP=64/64+22=0.744 F1 Score=2*(P*R) / (P + R) Recall = 0.81	i) 1 mark for correct anser ii) 1 mark each for correxct answer with calculation., ½ mark each for only correct value.

PRE-BOARD EXAMINATION (2025-26)

CLASS-X

ENGLISH LANGUAGE AND LITERATURE (CODE- 184)

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

General Instructions:

Read the instructions very carefully and strictly follow them:

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

2. The question paper contains THREE sections

    Section – A: Reading Skills

    Section – B: Grammar and Creative Writing Skills

    Section – C: Literature Textbook

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

SECTION A

Reading Skills (20 Marks)

1. Read the passage carefully and answer the questions that follow. (10)

(1) In today's fast-paced world, lifestyle choices play a crucial role in shaping our physical and mental health. A balanced lifestyle includes regular exercise, nutritious food, adequate sleep, and stress management. Unfortunately, unhealthy habits such as irregular eating, overconsumption of fast food, lack of physical activity, and excessive screen time are becoming increasingly common.

(2) According to medical research, lifestyle-related disorders such as obesity, diabetes, hypertension, and cardiovascular diseases are on the rise. The World Health Organization reports that over 650 million adults worldwide are obese, a condition linked to unhealthy eating and sedentary living. In India, rapid urbanisation and changing diets have contributed to rising cases of lifestyle diseases even among teenagers.

(3) Mental health is also affected by lifestyle choices. Poor sleep patterns, academic pressure, and social media addiction have increased stress and anxiety levels in young people. Experts emphasise that small changes—such as maintaining a sleep schedule, practising mindfulness, and engaging in outdoor activities—can significantly improve emotional well-being.

(4) The role of diet cannot be overstated. A diet rich in fruits, vegetables, whole grains, and adequate hydration strengthens the immune system. In contrast, processed foods high in sugar, salt, and trans fats may satisfy taste buds but harm long-term health. Nutritionists recommend moderation rather than complete avoidance, encouraging people to adopt the "80-20 rule": eat healthy most of the time, but allow occasional indulgence.

(5) Physical activity is another essential component of a healthy lifestyle. The World Health Organization suggests that teenagers should engage in at least 60 minutes of moderate to vigorous physical activity daily. Walking, cycling, yoga, and sports not only improve fitness but also reduce stress. Even simple choices, like taking the stairs instead of using an elevator, can make a difference.

(6) Importantly, lifestyle choices are not just individual concerns but also societal. Schools, workplaces, and communities play a role in promoting healthy habits. Campaigns against smoking, initiatives for clean eating, and government drives for yoga and fitness reflect growing awareness. Ultimately, health is shaped not by a single decision but by consistent choices made every day.

Answer the following questions based on the reading of the above passage:

(i) Mention two unhealthy lifestyle habits cited in the passage. (1)

(ii) Select the option that best explains the "80-20 rule" in diet. (1)

(A) Eating healthy 80% of the time and indulging occasionally.

(B) Eating only 80% of meals and skipping 20%.

(C) Eating processed food 80% and fresh food 20%.

(D) Avoiding 80% of food groups for better health.

(iii) How do lifestyle choices affect mental health? Mention any two ways. (2)

(iv) Fill in the blank: WHO recommends that teenagers should exercise for at least _____ daily. (1)

(A) 30 minutes (B) 45 minutes (C) 60 minutes (D) 90 minutes

(v) State two societal initiatives that promote healthy habits. (2)

(vi) True or False: Obesity and hypertension are examples of lifestyle-related diseases. (1)

(vii) What does the writer mean by "health is shaped by consistent choices made every day"? (2)

2. Read the passage carefully and answer the questions that follow: (10)

(1) Artificial Intelligence (AI) is the ability of machines to perform tasks that typically require human intelligence. It involves processes such as learning, reasoning, problem-solving, and decision-making. From healthcare to education, AI is transforming the way societies function.

(2) One of the earliest uses of AI was in chess-playing programs, where computers could calculate thousands of moves ahead. Today, AI powers self-driving cars, voice assistants, online recommendation systems, and medical imaging. Hospitals now use AI to detect diseases at early stages, helping doctors provide more accurate treatment.

(3) In education, AI platforms analyse a student's progress and customise lessons according to their strengths and weaknesses. This ensures personalised learning and allows teachers to focus on creative and critical aspects of education rather than repetitive tasks.

(4) AI is also playing a role in solving global issues. In agriculture, AI-based tools help farmers predict weather conditions, identify soil health, and optimise crop yields. In environmental studies, AI is used to model climate change and suggest sustainable solutions.

(5) However, AI raises concerns as well. With machines performing tasks once done by humans, many fear job losses in sectors like customer service, transport, and manufacturing. Ethical issues such as data

privacy, cyber risks, and algorithmic bias remain under debate. For instance, if AI learns from biased data, its decisions may also be biased.

(6) Experts suggest that the future of AI depends on responsible use. While it has the potential to become one of humanity's greatest tools, unchecked growth may pose serious risks. Striking a balance between innovation and regulation will be the key to ensuring AI benefits all of society.

Answer the following questions based on the reading of the above passage:

(i) What are two current uses of AI in healthcare? (1)

(ii) In the question given below, there are two statements marked as Assertion (A) and Reason (R). Read these statements and choose one correct answer from the given options

Assertion A: AI provides personalised learning in education.
Reason R: AI analyses student progress and customises lessons.

Choose the correct option: (1)

(A) Both A and R are true, and R explains A.

(B) Both A and R are true, but R does not explain A.

(C) A is true, R is false.

(D) A is false, R is true.

(iii) What can be inferred about the role of humans in an AI-driven future? (2)

(iv) What can we infer about the impact of AI on teachers' roles in education? (1)

(A) Teachers may become completely unnecessary
B) Teachers can focus more on higher-order tasks
C) Students will not require human guidance
D) AI will replace schools entirely

(v) What is algorithmic bias, and why is it a concern? (2)

(vi) What does the passage imply about the future of work in AI-driven sectors? (1)

A) All human jobs will be eliminated
B) Only robots will be employed
C) Certain job roles may change or reduce
D) Employment will not be affected at all

(vii) What do experts mean by saying "the future of AI depends on responsible use"? (2)

SECTION-B

Grammar & Creative Writing Skills (20 Marks)

Grammar (10×1=10)

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

(i) A school circular needs to be finalised. You're part of the organising team and must mention that a decision has now been made. Complete the sentence correctly: 1
The committee has finally _____ the date for the annual fest.

(ii) Your friend writes this in a travel vlog draft: 1
"The roads of this city is always crowded."
As the editor, how will you correct it to make it grammatically accurate?

(iii) You are writing a report to your teacher about a group discussion. Convert the question into reported speech: 1
He asked, "Did you complete the assignment on time?"

(iv) A parent is writing about their children's daily routine for the school magazine. Complete the sentence meaningfully: 1
The children _____ (play) **football in the park every evening.**

(v) You are texting your cousin about meeting plans. Complete the sentence: 1
I am looking forward to _____ (meet) **my cousin tomorrow.**

(vi) Your classmate wrote this sentence in a project reflection: 1
"The teacher gave me many informations about the project."
What correction would you suggest to make it grammatically correct?

(vii) You're preparing a script for a Geography presentation in class. Complete the sentence by choosing the correct verb form: 1
The Himalayas _____ covered with snow throughout the year.

(A) is (B) are (C) were (D) be

(viii) You are summarising a phone conversation in your diary. Rewrite this sentence in reported speech: 1
"I will call you tomorrow," said Neha.

(ix) Your group is planning a picnic, but the weather forecast shows rain. Complete the sentence in a conditional form: 1
If it rains, we _____ (stay) **indoors.**

(x) A student wrote this sentence in a resume: 1
"He is senior than me by two years."
Rewrite it correctly.

(xi) You are drafting an announcement for the school notice board. Complete the sentence using the correct passive form: 1
The principal announced that the results _____ (publish) **next week.**

(xii) In the attendance report, a teacher writes: 1
"One of the boy was absent today."
Rewrite the sentence correctly.

Creative Writing Skills (10 Marks)

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

4. Attempt ANY ONE from (A) and (B) given below: 5

(4A) You are Riya / Rohan of Class X, Springdale School, New Delhi. Write a letter to the Editor of a national daily expressing concern about the impact of social media on students, highlighting issues like distraction, cyberbullying, and addiction, and suggesting possible solutions.

OR

(4B) You are the Head Boy/Head Girl of your school. Write a letter to the Principal requesting stricter rules regarding the use of mobile phones in school, citing both the benefits and problems associated with them.

5. Attempt ANY ONE from (A) and (B) given below: 5

(5A) The chart below shows the percentage of students using online vs offline resources for learning in 2024. Write an analytical paragraph in about 120 words.

Resource Type	Percentage of Students
Online apps	45 %
Printed books	30 %
Coaching	15 %
Group study	10%

OR

(5B) Given below are details of renewable energy sources. Write an analytical paragraph in about 120 words:

- Solar: Abundant, eco-friendly, high setup cost
- Wind: Clean energy, depends on geography
- Hydro: Reliable, but affects ecosystems
- Biomass: Uses waste, but limited efficiency

SECTION-C

LITERATURE TEXT BOOKS (40 Marks)

6. Read the following extracts and answer the questions for ANY *ONE* of the given two, (A) or (B):

(6A) "A plague of locusts would have left more than this. The hail has left nothing.
This year we will have no corn.''

That night was a sorrowful one.
"All our work, for nothing."
''There's no one who can help us."
"We'll all go hungry this year."
But in the hearts of all who lived in that solitary house in the middle of the valley, there was a single hope: help from God.
"Don't be so upset, even though this seems like a total loss. Remember, no one dies of hunger."
"That's what they say: no one dies of hunger." (A Letter to God)

(i) What does the repeated use of words like "nothing" and "no one" emphasise in the extract? (1)

(ii) What does the expression *"That night was a sorrowful one"* reveal about the family's state of mind? (1)

(iii) *"Don't be so upset… no one dies of hunger."*
Do these lines reflect logic, denial, or emotional reassurance? Justify your answer with reference to the context. (2)

(iv) What tone is conveyed by the line, *"A plague of locusts would have left more than this."* ? (1)

A) Sarcasm B) Optimism C) Resentment D) Despair

OR

(6B) I awoke late next morning to find that Anil had already made the tea. He stretched out his hand towards me. There was a fifty-rupee note between his fingers. My heart sank. I thought I had been discovered.
"I made some money yesterday," he explained. "Now you'll be paid regularly."
My spirits rose. But when I took the note, I saw it was still wet from the night's rain.
"Today we'll start writing sentences," he said.
He knew. But neither his lips nor his eyes showed anything. I smiled at Anil in my most appealing way. And the smile came by itself, without any effort. (The Thief's Story)

(i) The phrase *"the smile came by itself"* suggests that the narrator— (1)

A) Was pretending to be happy
B) Felt genuine relief and affection
C) Wanted to hide his guilt
D) Was mocking Anil

(ii) How does Anil indirectly show that he knows about the theft? (1)

(iii) How does the author use the condition of the note ("still wet from the night's rain") to imply something deeper about the previous night's events? (2)

(iv) What does Anil's line *"Today we'll start writing sentences"* symbolise in the context of the story? (1)

7. Read the following extracts and answer the questions for any ***ONE*** of the given two, (A) or (B):

(7A) "The way a crow

Shook down on me

The dust of snow

From a hemlock tree…" (Dust of Snow)

(i) What effect did the crow's action have on the poet? (1)

(ii) Which figure of speech is used in "dust of snow"? (1)

(iii) Explain the symbolic significance of the crow and hemlock. (2)

(iv) Fill in: The poet's mood changed from _____ to _____. (1)

OR

(7B) "He stalks in his vivid stripes
The few steps of his cage,
On pads of velvet quiet,
In his quiet rage." (A Tiger in the Zoo)

(i) What emotion is suggested by the phrase *"quiet rage"*? (1)

A) Joy hidden deeply B) Suppressed anger
C) Pride and confidence D) Fear of humans

(ii) Fill in: The tiger's 'pads of velvet' suggest his movement is _____. (1)

(iii) What do the lines suggest about the contrast between the tiger's nature and his situation? (2)

(iv) Identify the rhyme scheme of the extract. (1)

8. Answer ANY *FOUR* of the following five questions in 40 – 50 words each: 4X3=12

(i) Why does Mandela call courage "not the absence of fear but the triumph over it"? (Nelson Mandela)

(ii) How does Valli's bus journey reflect her curiosity and determination? (Madam Rides the Bus)

(iii) Why did the baker's furnace hold special significance in Goa? (A Baker from Goa)

(iv) How does humour educate readers in "How to Tell Wild Animals"?

(v) Why was transporting Mijbil to England a nightmare for the narrator? (Mijbil the Otter)

9. Answer ANY ***TWO*** of the following three questions in 40 – 50 words each: 2X3=6

(i) 'Privilege often confuses actual needs for perceived ones.' Evaluate this statement with reference to Mrs. Pumphrey. (A Triumph of Surgery)

(ii) Scientists contribute to make the world a better place. Griffin is an antithesis to this statement. Justify. (Footprints without Feet)

(iii) What role did the "Book" play in saving the Earth? (The Book That Saved the Earth)

10. Answer ANY *ONE* of the following two questions in 100 – 120 words: 6

(A) Compare Amanda's longing for independence with Valli's adventurous spirit. (Amanda / Madam Rides the Bus)

OR

(B) How do both Mandela and Berryman (The Ball Poem) use the theme of loss to highlight resilience and growth? (Nelson Mandela / The Ball Poem)

11. Answer ANY ONE of the following two questions in 100 – 120 words: 6

Did the sacrifices made by the Loisels prove to be meaningless? Justify. (The Necklace)

OR

What strategy did Horace Danby prepare to break into Shotover Grange? (A Question of Trust)

PRE-BOARD SUB- ENGLISH (LANGUAGE AND LITERATURE- 184)

MARKING SCHEME

Section A — Reading Skills (20 marks)

Q1 (Passage: Lifestyle choices) — (10 marks)

(i) Any two unhealthy habits (1)

- Irregular eating; overconsumption of fast food. (Also acceptable: lack of physical activity, excessive screen time.)

(ii) "80–20 rule" — (1)

- (A) Eating healthy 80% of the time and indulging occasionally.

(iii) Two ways lifestyle affects mental health — (2)

- Poor sleep patterns increase stress/anxiety.
- Social media addiction / academic pressure increase anxiety and stress.

(iv) WHO recommends teenagers exercise for at least _____ daily — (1)

- (C) 60 minutes

(v) Two societal initiatives that promote healthy habits — (2)

- Campaigns against smoking; government/ community drives for yoga and fitness. (Other acceptable: initiatives for clean eating, school/workplace health programmes.)

(vi) True/False — (1)

- True.

(vii) Meaning of "health is shaped by consistent choices made every day" — (2)

- Small, regular habits (sleep, diet, exercise, stress management) accumulate over time to determine long-term physical and mental health; one-off actions are not enough.

Q2 (Passage: Artificial Intelligence) — (10 marks)

(i) Two current uses of AI in healthcare — (1)

- Medical imaging (diagnosis) and early disease detection/predictive diagnostics. (Also acceptable: treatment-planning assistance, automated record analysis.)

(ii) Assertion–Reason — (1)

- (A) Both A and R are true, and R explains A.

(iii) Role of humans in an AI-driven future — (2)

•Humans will not be replaced entirely but will need to adapt, supervise, and collaborate with AI. Their role will shift from repetitive tasks to decision-making, creativity, and responsible oversight.
(iv) we can infer about the impact of AI on teachers' roles in education — (1)

- (B) Teachers can focus more on higher-order tasks

(v) Algorithm bias and its conerns — (2)

- **Algorithmic bias** occurs when an AI system makes unfair or prejudiced decisions because it has been trained on data that contains human biases or unequal representation. As a result, the AI reflects those biases in its output.

It is a **serious concern** because it can lead to discrimination in important areas like hiring, healthcare, education, or banking. Biased AI decisions can harm individuals, reduce fairness, and create ethical and social inequality, making people lose trust in technology.

(vi) What does the passage imply about the future of work in AI-driven sectors? (1)

- C) Certain job roles may change or reduce

(vii) Meaning of "future of AI depends on responsible use" — (2)

- When experts say **"the future of AI depends on responsible use,"** they mean that AI should be developed and used with **care, ethics, and regulation**. If AI is used responsibly—by ensuring data privacy, fairness, transparency, and safety—it can benefit society in fields like healthcare, education, and climate solutions.

However, if AI is misused or left unchecked, it may lead to problems like job loss, data theft, or biased decisions. So, the progress and positive impact of AI depend on how wisely humans control and guide its development and application.

Section B — Grammar & Creative Writing (20 marks)

Q3 — Grammar (answers concise)

(i) The committee has finally decided on the date of the annual fest.

(ii) Corrected: The roads of this city are always crowded.

(iii) Reported speech: He asked me if/whether I had completed the assignment on time.

(iv) The children play football in the park every evening.

(v) I am looking forward to meeting my cousin tomorrow.

(vi) Corrected: The teacher gave me a lot of information about the project. (Replace "many informations" with "a lot of information" / "much information")

(vii) Correct option: (B) are — The Himalayas are covered with snow.

(viii) Reported: Neha said (that) she would call me the next day.

(ix) If it rains, we will stay indoors.

(x) Corrected: He is senior to me by two years. (OR: He is two years older than I.)

(xi) The principal announced that the results would be published next week.

(xii) Corrected: One of the boys was absent today.

(Any equivalent correct forms accepted.)

Q4 — Letter (5 marks)

Marking split: Content & ideas (3), Format/letter conventions (1), Expression/language (1).

Key points to include (choose relevant, write formally):

Option (a) Letter to Editor about social media

- State identity (Riya/Rohan, Class X, Springdale School).
- Describe problems: distraction, reduced attention, cyberbullying, addiction, impact on studies/mental health.
- Give evidence/examples and suggest solutions: digital literacy, parental controls, school counselling, awareness campaigns, fixed screen times.
- Polite request/appeal to public / authorities.

Option (b) Letter to Principal requesting strict mobile rules

- State role (Head Boy/Head Girl).
- Benefits of mobiles (learning, safety) and problems (cheating, distraction, cyberbullying).
- Propose rules: restricted timings, phone-free classrooms, secured storage, awareness drives.
- Request enforcement & offer help implementing.

(Award marks for relevance, organization, polite tone, appropriate salutations and signature.)

Q5 — Analytical Paragraph (5 marks)

Marking split: Content/analysis (3), Organisation/coherence (1), Language/word-limit (1).

(a) Online vs Offline resources — key points to include:

- Percentages (Online apps 45%, Printed books 30%, Coaching 15%, Group study 10%).
- Trend: online dominant but printed books still significant.
- Reasons: accessibility of apps, convenience; printed books — reliability; coaching for focused help; group study for peer learning.

- Conclude implications for educators/parents.

Model paragraph (≈110–120 words) — (use as model answer):

In 2024, online apps (45%) the most used learning resource,

surpassing printed books (30%), coaching (15%) and group study (10%).

clear shift towards digital platforms

,instant feedback and flexibility.

Printed books for in-depth study and exam practice,

coaching centres targeted support and discipline.

Group study,.

the implication is to blend digital tools with traditional materials —

integrating reliable online through books

students to use apps effectively rather than as a sole resource.

(b) Renewable energy paragraph — similar structure: list pros/cons for each source, compare, conclude policy implication.)

Section C — Literature (40 marks)

Note: For extract questions accept answers grounded in the text; award credit for relevant textual reference, brief justification and concision.

Q6 — Extract-based Prose (5 marks each option)

(a) "A Letter to God" — Model answers

(i) The repeated use of words like **"nothing"** and **"no one"** highlights a strong sense of **hopelessness, loss, and despair**. It shows that the people feel completely helpless after the destruction and believe they have no support or resources left. This repetition reinforces the emotional impact of their suffering and the severity of their situation. (1)

(ii) It shows that the family was deeply saddened, worried, and emotionally broken after losing their crops. The line reflects their grief, fear of the future, and sense of helplessness. (1)

(iii) The lines reflect **emotional reassurance and denial mixed with hope**. The speaker tries to stay positive despite real danger. It shows faith used as comfort, rather than logic or certainty. (2)

(iv) D. Despair (1)

(b) "The Thief's Story" — Model answers

(i) (B) Felt genuine relief and affection (1)

(ii) He gives the same wet note silently and doesn't scold or question him, showing he knows everything. (1)

(iii) The note being "still wet from the night's rain" is a subtle hint that Anil already knows the boy stole the money and returned it. Since the note was exposed to the rain, it proves it had been taken out of the house at night.

Instead of confronting or shaming him, Anil quietly accepts the money and offers trust and guidance. The wet note symbolises both the narrator's guilt and Anil's silent forgiveness, showing understanding without humiliation. (2)

(iv) It symbolises a fresh start, learning, trust, and transformation. (1)

(Accept any textual justification consistent with the story.)

Q7 — Extract-based Poetry (5 marks each option)

(a) "Dust of Snow" — Model answers

(i) The crow's action lifted the poet's spirits — it changed his mood for the better. (1)

(ii) Figure of speech: Imagery (vivid sensory image). (Award for "metaphor" if student argues convincingly; accept "symbolism".) (1)

(iii) Symbolic significance: the crow (unexpected small agent) and hemlock (gloomy/poisonous tree) together show that a tiny, unexpected moment from an unlikely source can bring joy and change outlook. (2)

(iv) Fill: from sadness to cheerfulness (or gloom → cheer). (1)

(b) "A Tiger in the Zoo" — Model answers

(i) B) Suppressed anger (1)

(ii) 'Pads of velvet' suggest silent/soft movement. (1)

(iii) Irony: the tiger's majestic power and natural freedom are contradicted by the small cage and his restrained, quiet rage — he is powerful yet imprisoned. (2)

(iv) Rhyme scheme of the extract: A B C B (lines 2 and 4 rhyme: "cage" / "rage"; others do not). (1)

Q8 — Short Answer (Any 4 × 3 = 12 marks) — model concise answers (≈30–40 words)

(i) Mandela — courage: Mandela means courage isn't not feeling fear but acting in spite of fear; true bravery is overcoming fear to do what is right.

(ii) Valli's bus journey: Valli's journey shows curiosity and determination—she saves money, persuades the conductor and overcomes fear to explore beyond her village.

(iii) Baker's furnace (A Baker from Goa): The furnace was central to the baker's trade and identity; it produced bread that connected community and tradition, symbolising livelihood and cultural continuity.

(iv) Humour in "How to Tell Wild Animals": Humour and satire teach readers caution and respect for animals; by joking, the author exposes human folly and makes lessons memorable.

(v) Transporting Mijbil: It was a nightmare because of practical difficulties (paperwork, quarantine, care, stench and attention needed for an otter crossing countries) and the narrator's inexperience.

(Give credit for relevant textual points.)

Q9 — Short Answer (Any 2 × 3 = 6 marks)

(i) Mrs. Pumphrey's excessive affection made her confuse Tricki's **perceived needs** with real ones. Believing he needed constant treats, rich food and pampering, she ignored his actual need for exercise and a controlled diet, causing his health to decline despite her good intentions.

(ii) Scientists are generally seen as innovators who improve lives through knowledge and invention. Griffin, however, misuses his scientific discovery of invisibility for selfish and harmful purposes. Instead of helping society, he resorts to theft, violence and destruction. His actions show how science without ethics can become dangerous, making him the opposite of scientists who work for humanity's welfare.

(iii) The Book (The Book That Saved the Earth): The Book acted as humanity's representative—its literature and ideas convinced alien visitors of human worth/culture and helped avert Earth's destruction.

Q10 — Long Answer (6 marks)

Choose one — structure and key points (concise model):

(a) Compare Amanda's longing for independence with Valli's adventurous spirit

- Intro (1): both desire change but differ in motivation.
- Amanda: desires escape from family/stifling rules, yearning for independence, romanticises adult life.
- Valli: curiosity-driven courage, proactive (saves money, goes to town) and experiential.
- Compare outcomes: Amanda's longing is emotional/internal; Valli's is action-oriented with immediate achievement.
- Conclude: both show young people's desire to change circumstances, but approach and result differ.

(Award marks for coherence, textual references, comparative analysis — intro, points, conclusion.)

(b) Mandela & Berryman — theme of loss

- Intro: both use loss to show resilience.
- Mandela: loss of freedom -> moral courage, political growth.
- "The Ball Poem": loss of a ball => lesson about accepting loss and learning to value intangible things.
- Conclude: loss leads to maturity and emotional growth.

Q11 — Long Answer (6 marks)

Choose one — structure and key points

(a) The Necklace

(Any Three value points)

(a) Matilda – borrowed the necklace from her friend – lost it – made

(b) sacrifices to return the necklace

(c) Led a miserable life – changed lodgings – rented a room in the attic – did

(d) menial work in the kitchen – took down the refuge to the street – clothed

(e) like an ordinary woman

(f) Mr. Loisel also worked hard for a merchant- did copying at 5 sous a page

(g) Took ten years to pay the debt incurred in buying a new necklace

(h) Accidently met her friend after ten years – was informed that the necklace was fake

(i) Realized – all her sacrifices were in vain

(j) (Any other relevant point to be accepted)

(b) (A Question of Trust)

(Any Three value points)

Horace planned the robbery in all details.

A magazine article had described the house with all the rooms and

mentioned the safe behind the painting.

For 2 weeks, he studied the house, its rooms, electric wiring, path

and its garden / knew the dog by name

He had definite information that the two servants had gone to the

movies.

He came out from behind the garden wall.

Packed his tools carefully on his back.

Put on gloves, knew the house keeper hung the key to the kitchen door on a hook inside. He took the key and opened the house.

SET-3

प्रथम पूर्व परिषदीय परीक्षा (2025-26)

हिन्दी(पाठ्यक्रम-अ) विषय कोड-002

कक्षा: दसवीं

विषय- हिंदी

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

सामान्य निर्देश –

निम्नलिखित निर्देशों को बहुत सावधानी से पढ़िए और उनका 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 आतंरिक विकल्प दिए गए हैं।

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

प्रश्न संख्या	**खंड – क (अपठित बोध)**	**अंक 14**
1.	**निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर उस पर आधारित पूछे गए प्रश्नों के उत्तर लिखिए :**	**7**
	प्राकृतिक आपदाएँ आज सिर्फ एक दूर की खबर नहीं रह गई हैं, बल्कि मानव जीवन, अर्थव्यवस्था और पर्यावरण पर प्रत्यक्ष एवं गहरा प्रभाव डालने वाली वास्तविक चुनौतियाँ बन चुकी हैं। हाल ही के नवीनतम आंकड़ों से पता चलता है कि भारत और विश्व भर में ये घटनाएँ अधिक तीव्रता और आवृत्ति के साथ हो रही हैं।अंतर्राष्ट्रीय दृष्टिकोण से देखें तो, 2024 में प्राकृतिक आपदाओं से होने वाले आर्थिक नुकसान लगभग 368 अरब डॉलर पहुँच चुके हैं, जिसमें हरिकेन, बाढ़ और तूफान प्रमुख भूमिका निभा रहे हैं। भारत की स्थिति भी चिंता पैदा करने वाली है। वर्ष 2025 के मानसून और बारिश से भारत के उत्तरी राज्य जैसे पंजाब, पंजाब-उत्तरी भारत और हिमाचल प्रदेश या जम्मू-कश्मीर में भारी बाढ़ और बादल फटने जैसी घटनाएँ हुईं। पंजाब में लगभग 2000 से अधिक गाँव बाढ़ की चपेट में आए, करीब 3 लाख से अधिक लोग प्रभावित हुए और फसलों एवं पशुपालन को भारी क्षति हुई। उत्तरी भारत में, खासकर हिमालयी क्षेत्रों में, अचानक बादल फटने और ग्लेशियर झील विस्फ़ोट की घटनाएँ बढ़ रही हैं, जिससे पहाड़ी इलाकों में भारी भूस्खलन और बाढ़ का खतरा अधिक हो गया है। इन आंकड़ों से स्पष्ट है कि प्राकृतिक आपदाओं की तीव्रता और लागत दोनों में वृद्धि हो रही है — मनुष्यों की जानों का नुकसान, विस्थापन, और आर्थिक बाधाएँ। इसका मूल कारण अक्सर जलवायु परिवर्तन, अस्थिर मौसम चक्र, भूमि उपयोग में बदलाव (जैसे वनों की कटाई), तीव्र शहरीकरण और पूर्व चेतावनी एवं आपदा प्रबंधन तंत्र की कमज़ोरियाँ हैं।इस प्रकार, प्राकृतिक आपदाएँ अब केवल "प्राकृतिक" नहीं रहीं; मानव निर्मित संवेदनशीलता के साथ वे सामाजिक-आर्थिक मुद्दे बन गई हैं जिनका संघर्ष केवल बचाव-कार्य से नहीं, बल्कि पूर्व तैयारी, जलवायु अनुकूलन, और सामूहिक जागरूकता द्वारा किया जाना चाहिए।	
(क)	प्राकृतिक आपदाओं से बचाव के लिए सबसे जरूरी क्या है? (i) अंधाधुंध वनों की कटाई (ii) जल प्रदूषण (iii) पूर्व चेतावनी प्रणाली (iv) अनियंत्रित शहरीकरण	**1**

(ख)	कथन : प्राकृतिक आपदाएँ लंबे समय तक समाज पर असर डालती हैं। कारण : आपदाएँ कृषि उत्पादन, रोजगार और जीवन-यापन के साधनों को नष्ट कर सामाजिक और आर्थिक असमानता बढ़ा देती हैं। विकल्प: (i) कथन सही है, कारण गलत है। (ii) कथन गलत है, कारण सही है। (iii) कथन सही है और कारण कथन की सही व्याख्या है । (iv) कथन सही है किन्तु कारण कथन की सही व्याख्या नहीं है ।	**1**
(ग)	अनुच्छेद में वर्णित प्राकृतिक आपदाओं के प्रभावों के संदर्भ में सही कथन का चयन कीजिए— (I) प्राकृतिक आपदाओं से विस्थापन और गरीबी बढ़ती है। (II) परिवहन, व्यापार और कृषि प्रभावित होते हैं। (III) आपदाओं का असर केवल प्रभावित गाँवों तक सीमित रहता है। (IV) शिक्षा और स्वास्थ्य सेवाएँ बाधित होती हैं। विकल्प: (i) कथन (I) और (II) सही हैं। (ii) कथन (I), (II) और (IV) सही हैं। (iii) कथन (II) और (III) सही हैं। (iv) कथन (III) और (IV) सही हैं।	**1**
(घ)	आपदा प्रबंधन में सामुदायिक भागीदारी क्यों आवश्यक है?	**2**
(ड़)	हिमालयी क्षेत्रों में भूस्खलन और बादल फटने की घटनाएँ क्यों बढ़ रही हैं ?	**2**
2.	**निम्नलिखित काव्यांश को ध्यानपूर्वक पढ़कर उस पर आधारित पूछे गए प्रश्नों के उत्तर लिखिए :**	**7**
	और पानी गिर रहा है, घर चतुर्दिक् घिर रहा है, पिताजी भोले बहादुर,वज्र-भुज नवनीत-सा उर, पिताजी जिनको बुढ़ापा,एक क्षण भी नहीं व्यापा, जो अभी दौड़ जाएँ,जो अभी भी खिल-खिलाएँ, मौत के आगे न हिचकें,शेर के आगे न बिचकें, बोल में बादल गरजता,काम में झंझा लरजता, आज गीता पाठ करके,दंड दो सौ साठ करके, ख़ूब मुगदर हिला लेकर,मूठ उनकी मिला लेकर, जब कि नीचे आए होंगेनैन जल से छाए होंगे, हाय, पानी गिर रहा है,घर नज़र में तिर रहा है, चार भाई चार बहिनें,भुजा भाई प्यार बहिनें, खेलते या खड़े होंगे,नज़र उनकी पड़े होंगे। पिताजी जिनको बुढ़ापा,एक क्षण भी नहीं व्यापा, रो पड़े होंगे बराबर, पाँचवें का नाम लेकर,	

	पाँचवाँ मैं हूँ अभागा, जिसे सोने पर सुहागा, पिताजी कहते रहे हैं, प्यार में बहते रहे हैं,	
(क)	"मौत के आगे न हिचकें, शेर के आगे न बिचकें" – यहाँ कवि का मुख्य आशय है – (i) पिताजी धार्मिक और आध्यात्मिक हैं (ii) पिताजी अत्यन्त निर्भीक और साहसी हैं (iii) पिताजी को मृत्यु और जीवन में कोई अंतर नहीं लगता (iv) पिताजी ने मृत्यु को ही अपना मित्र मान लिया है	**1**
(ख)	"पिताजी भोले बहादुर, वज्र-भुज नवनीत-सा उर," पंक्तियों में कौन-सा विरोधाभास रूप में प्रयुक्त है? (i) कठोरता और कोमलता का संगम (ii) वीरता और दीनता का संगम (iii) बुढ़ापा और जवानी का संगम (iv) धर्म और अधर्म का संगम	**1**
(ग)	निम्नलिखित कथन और कारण पर विचार करते हुए उपयुक्त विकल्प का चयन कर लिखिए कथन: "आज गीता पाठ करके, दंड दो सौ साठ करके।" कारण: कवि यह संकेत देता है कि पिताजी केवल धार्मिक प्रवृत्ति वाले नहीं, बल्कि शारीरिक दृष्टि से भी अत्यन्त पराक्रमी और अनुशासित हैं। (i) कथन और कारण दोनों सही हैं तथा कारण कथन की सही व्याख्या करता है। (ii) कथन और कारण दोनों सही हैं, पर कारण कथन की सही व्याख्या नहीं करता। (iii) कथन सही है, कारण गलत है। (iv) कथन गलत है, कारण सही है।	**1**
(घ)	कविता में पारिवारिक वातावरण का किस प्रकार चित्रण किया गया है? स्पष्ट करें।	**2**
(ड़)	कविता के माध्यम से कवि ने अपने पिता के प्रति श्रद्धा और आदर्श प्रस्तुत किए हैं। यह श्रद्धा मात्र भावुकता नहीं बल्कि जीवन के मूल्य और अनुशासन का भी प्रतीक है। स्पष्ट कीजिए।	**2**
	खंड – ख **(व्यावहारिक व्याकरण)**	**16**
3.	**निर्देशानुसार 'रचना के आधार पर वाक्य भेद' पर आधारित पाँच प्रश्नों में से किन्हीं चार के उत्तर लिखिए :**	**4x1=4**
(क)	वह इतना थक गया कि तुरंत सो गया। । (रचना की दृष्टि से वाक्य का भेद लिखिए)	
(ख)	नानी जी कहती हैं कि मैं अध्यापिका बनूं। (वाक्य को सरल वाक्य में बदलिए)	
(ग)	सूर्य निकलते ही कमल खिल उठे। (वाक्य को मिश्र वाक्य में बदलिए)	
(घ)	<u>जो पैसे मुझे मिले थे</u> ,वे खर्च हो गए । (रेखांकित उपवाक्य का भेद लिखिए)	
(ड़)	नेताजी भाषण देकर चले गए। (वाक्य को संयुक्त वाक्य में बदलिए)	
4.	**निर्देशानुसार 'वाच्य' पर आधारित पाँच प्रश्नों में से किन्हीं चार के उत्तर लिखिए :**	**4x1=4**
(क)	यह कार्य मुझसे नहीं हो पाएगा। (कर्तृवाच्य में बदलिए)	
(ख)	अध्यापक ने विद्यार्थियों को पुरस्कार दिया। (कर्मवाच्य में बदलिए)	

(ग)	सैनिक नहीं डरा । (भाववाच्य में बदलिए)	
(घ)	डाकिए द्वारा पत्र पहुँचाया गया। (वाच्य पहचानकर उसका भेद लिखिए)	
(ड़)	उससे तो उठा भी नहीं जाता। (कर्तृवाच्य में बदलिए)	
5.	**निर्देशानुसार 'पद परिचय' पर आधारित पाँच प्रश्नों में से किन्ही चार प्रश्नों के रेखांकित पदों का पद-परिचय लिखिए :**	**4x1=4**
(क)	**राम** ने गीता को पुस्तक दी। ।	
(ख)	वह बगीचे में **सुंदर** फूल तोड़ रहा है ।	
(ग)	**वे** खेल रहे हैं ।	
(घ)	सीता ने **धीरे-धीरे** गीत गाया ।	
(ड़)	कर्मचारी बातें कर रहे थे ।	
6.	**निर्देशानुसार अलंकार पर आधारित पांच प्रश्नों में से किन्हीं चार प्रश्नों की रेखांकित काव्य पंक्तियों में अलंकार पहचान कर उत्तर लिखिए :**	**4x1=4**
(क)	बढ़त देखि जल सम वचन बोले रघुकुल भानु ।	
(ख)	प्रीति नदी में पाऊं न बोरयो, दृष्टि न रूप परागी।	
(ग)	तुम्हारी यह दन्तुरित मुस्कान, मृतक में भी डाल देगी जान ।	
(घ)	सागर के उर पर नाच- नाच करती हैं लहरें मधुर गान	
(ड़)	अति कटु बचन कहत कैकयी ,मानहुं लोन जरे पर देहि ।	
	खंड – ग **(पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)**	**30**
7.	**निम्नलिखित पठित गद्यांश पर आधारित बहुविकल्पीय प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए :**	**5x1=5**
	किंतु खेतीबारी करते, परिवार रखते भी, बालगोबिन भगत साधु थे- साधु की सभी परिभाषाओं में खरे उतरने वाले। कबीर को 'साहब' मानते थे, उन्हीं के गीतों को गाते, उन्हीं के आदेशों पर चलते। कभी झूठ नहीं बोलते, खरा व्यवहार रखते। किसी से भी दो टूक बात करने में संकोच नहीं करते, ना किसी से खामखाह झगड़ा मोल लेते। किसी की चीज़ नहीं छूते, न बिना पूछे व्यवहार में लाते। इस नियम को कभी-कभी इतनी बारीकी तक ले जाते कि लोगों को कुतूहल होता! कभी वह दूसरे के खेत में शौच के लिए भी नहीं बैठते! वह गृहस्थ थे; लेकिन उनकी सब चीज़ 'साहब' की थी। जो कुछ खेत में पैदा होता, सिर पर लादकर पहले उसे साहब के दरबार में ले जाते-जो उनके घर से चार कोस दूरी पर था-एक कबीरपंथी मठ से मतलब! वह दरबार में 'भेंट' स्वरूप रख लिया जाकर 'प्रसाद' रूप में जो उन्हें मिलता, उसे घर लाते और उसी से गुज़र चलाते!	
(क)	कथन और कारण पर विचार करते हुए सही विकल्प चुनिए: **कथन**: बालगोबिन भगत साधु प्रकृति के थे। **कारण**: गृहस्थ होते हुए भी निर्मोही जीवन व्यतीत करते थे। **विकल्प**: (i) कथन सही है, किंतु कारण गलत है। (ii) कथन गलत है, किंतु कारण सही है। (iii) कथन और कारण दोनों सही हैं तथा कारण, कथन की सही व्याख्या करता है। (iv) कथन के लिए कारण सही व्याख्या नहीं है।	**1**

(ख)	लेखक ने बालगोबिन भगत को साधु क्यों कहा है? (i) वे साधु के समान दिखते थे। (ii) वे पैदल यात्रा करते थे। (iii) वे सच्चे साधुओं जैसा ही उत्तम आचार-विचार रखते थे। (iv) वे अच्छा गाना गाते थे ।	**1**
(ग)	गद्यांश में वर्णित 'दरबार में भेंट रूप रख आना' का क्या आशय है? (I) वे राजा को कर चुकाते थे। (II) वे कबीर साहब की भक्ति के लिए अपनी पैदावार अर्पित करते थे। (III) वे पैदावार बेचकर पैसा इकट्ठा करते थे। (IV) वे पूजा-पाठ के लिए वस्तुएँ खरीदते थे। विकल्प – (i) कथन (I) और (III) सही हैं। (ii) कथन (II) ही सही है। (iii) कथन (III) और (IV) सही हैं। (iv) कथन (II) और (IV) सही हैं।	**1**
(घ)	बालगोबिन भगत कबीर के आदर्शों पर चलते थे क्योंकि- (i) कबीर भगवान का रूप थे । (ii) वह कबीर की विचारधारा से प्रभावित थे। (iii) कबीर उनके गाँव के मुखिया थे। (iv) कबीर उनके मित्र थे ।	**1**
(ड़)	बालगोबिन भगत की साधुता किस रूप में सबसे स्पष्ट दिखाई देती है? (i) उनके पास अच्छा-साफ-सुथरा मकान था। (ii) वे खेती-बाड़ी भी करते थे। (iii). वे झूठ नहीं बोलते थे और दूसरों का अपमान नहीं करते थे। (iv) वे दरबार में भेंट रख आते थे।	**1**
8.	**निर्धारित गद्य पाठों के आधार पर निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25 – 30 शब्दों में लिखिए :**	**3x2=6**
(क)	लखनवी अंदाज कहानी नवाब साहब के माध्यम से नवाबी परंपरा पर व्यंग्य है । स्पष्ट कीजिए ।	
(ख)	"हमारे आपके घरों की लड़कियों को शोभा देता है यह सब ?" लेखिका के पिता के मित्र का यह वाक्य महिलाओं के प्रति समाज के कुछ लोगों की किस सोच की और संकेत करता है ?	
(ग)	"वो लँगड़ा क्या जाएगा फौज में, पागल है पागल!" कैप्टन के प्रति पानवाले की इस टिप्पणी पर अपनी प्रतिक्रिया लिखिए।	
(घ)	'संस्कृति' पाठ का लेखक कल्याण की भावना को ही संस्कृति और सभ्यता का महत्वपूर्ण तत्व मानता है । – स्पष्ट कीजिए ।	

9.	**निम्नलिखित पठित काव्यांश पर आधारित बहुविकल्पीय प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए :**	**5x1=5**
	तारसप्तक में जब बैठने लगता है उसका गला प्रेरणा साथ छोड़ती हई 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 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।	
(क)	कथन : जब मुख्य गायक का गला बैठने लगता है तो संगतकार का स्वर उसकी सहायता करता है। कारण : संगतकार का स्वर यह बताने के लिए आता है कि गायक अकेला नहीं है। विकल्प : (i) कथन सही है, किंतु कारण गलत है। (ii) कथन गलत है, किंतु कारण सही है। (iii) कथन और कारण दोनों सही हैं तथा कारण, कथन की सही व्याख्या करता है। (iv) कथन के लिए कारण सही व्याख्या नहीं है।	**1**
(ख)	कथन : अपनी आवाज़ को ऊँचा न उठा पाने की स्थिति असफलता कहलाती है। कारण : कवि के अनुसार यह स्थिति गायक की मानवीयता और उसकी सीमाओं को दर्शाती है। (i) कथन सही है, किंतु कारण गलत है। (ii) कथन गलत है, किंतु कारण सही है। (iii) कथन के लिए कारण सही व्याख्या नहीं है। (iv) कथन और कारण दोनों सही हैं तथा कारण, कथन की सही व्याख्या करता है।	**1**
(ग)	गायक की आवाज़ को 'राख जैसा कुछ गिरता हुआ' क्यों कहा गया है? (i) उसकी आवाज़ पूरी तरह नष्ट हो जाती है। (ii) उत्साह और प्रेरणा मद्धिम हो जाते हैं। (iii) उसकी आवाज़ सुरीली हो उठती है। (iv) श्रोताओं की रूचि समाप्त हो जाती है।	**1**
(घ)	जब गायक का स्वर रुक जाता है, तो संगतकार का स्वर— (i) उसका उपहास करता है। (ii) उसका स्थान ले लेता है। (iii) उसे यह विश्वास दिलाता है कि वह अकेला नहीं है। (iv) गाने को समाप्त कर देता है।	**1**

(ड़)	कवि ने गायक की आवाज बैठने को किस प्रकार चित्रित किया है ? (i) उत्साह और प्रेरणा का कम होना । (ii) आवाज में निराशा झलकना । (iii) आवाज का ऊँची होना । (iv) गाते हुए अनहद में चला जाना । विकल्प – (i) कथन (I) और (II) सही हैं। (ii) कथन (II) ही सही है। (iii) कथन (III) और (IV) सही हैं। (iv) कथन (II) और (IV) सही हैं।	**1**
10.	**निर्धारित कविताओं के आधार पर निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25 -30 शब्दों में लिखिए :**	**3x2=6**
(क)	परशुराम के क्रोध करने पर लक्ष्मण ने धनुष के टूट जाने के लिए कौन-कौन से तर्क दिए?	
(ख)	'अट नहीं रही है' कविता में कवि ने प्रकृति की व्यापकता का वर्णन किन रूपों में किया है?	
(ग)	कवि जयशंकर प्रसाद ने 'आत्मकथ्य' कविता में न चाहते हुए भी अपने जीवन के बारे में बहुत सी घटनाओं का वर्णन किया है। स्पष्ट कीजिए ?	
(घ)	'गुर चांटी ज्यों पागी' कहकर गोपियाँ अपनी किस दशा का बोध करा रही हैं?	
11.	**पूरक पाठ्यपुस्तक के निर्धारित पाठों पर आधारित निम्नलिखित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 50-60 शब्दों में लिखिए :**	**2x4=8**
(क)	"सैनिकों द्वारा ब्रह्मपुत्र नदी में बम फेंककर मछलियों को मारना" वर्तमान में मनुष्य की किस प्रवृत्ति की ओर संकेत करता है?	
(ख)	'जहाँ बुड्ढों का संग ,तहां खर्चे का तंग' प्रस्तुत पंक्ति के माध्यम से समाज में बुजुर्गों की निरंतर उपेक्षा की ओर संकेत किया गया है .स्पष्ट कीजिए .	
(ग)	'साना- साना हाथ जोड़ि ' पाठ के आधार पर यात्राओं से मनुष्य के जीवन में आने वाले सकारात्मक परिवर्तनों का वर्णन कीजिए।	
	खंड – घ (रचनात्मक लेखन)	**20**
12.	निम्नलिखित तीन विषयों में से **किसी एक** विषय पर संकेत बिंदुओं के आधार पर लगभग 120 शब्दों में एक अनुच्छेद लिखिए : **(क) बढ़ता सड़क दुर्घटनाओं का खतरा** * दुर्घटनाओं के कारण (लापरवाही, नशा, तेज रफ्तार) * परिवार और समाज पर असर * यातायात नियमों का पालन न करना * सड़क सुरक्षा शिक्षा की आवश्यकता **(ख) कृत्रिम बुद्धिमत्ता (AI) और भविष्य की चुनौतियाँ** * आधुनिक तकनीक का विकास * रोजगार और शिक्षा पर असर * फायदे : चिकित्सा, परिवहन, उद्योग में प्रयोग	**1x6=6**

	* खतरे : बेरोजगारी, मानवता पर असर * संतुलित प्रयोग की आवश्यकता **(ग) प्लास्टिक प्रदूषण और एकल उपयोग प्लास्टिक पर रोक** * प्लास्टिक से पर्यावरण और स्वास्थ्य को खतरा * समुद्री जीवन पर असर * वैकल्पिक साधन (कपड़े/जूट के बैग) * जन-जागरूकता और सरकार की नीतियाँ	
13.	**(क)** आप सीमा/सुमित हैं। कुछ विभागों के सूचनापट्टों पर अशुद्ध हिंदी लिखी मिलती है। इस ओर ध्यान आकृष्ट कराते हुए किसी प्रसिद्ध समाचार -पत्र के सम्पादक को लगभग 100 शब्दों में पत्र लिखिए। **अथवा** **(ख)** आप सीमा/सुमित हैं। आपने हाल ही में "स्वस्थ जीवन के घरेलू उपाय" नामक एक पुस्तक तैयार की है। इसके प्रकाशन के अवसर पर अपने मित्र को आमंत्रित करते हुए लगभग 100 शब्दों में पत्र लिखिए।	**1x5=5**
14.	**(क)** आप रेखा/राकेश हैं। आपने बी.ए. और डीएलएड. किया है। आपके नगर के एक प्रतिष्ठित विद्यालय में प्राथमिक शिक्षक के कुछ पद रिक्त हैं। आपको उस पद के लिए आवेदन करना है। इसके लिए लगभग 80 शब्दों में अपना एक स्ववृत्त लेख (बायोडाटा) तैयार कीजिए। **अथवा** **(ख)** आप रेखा/राकेश हैं। आपके क्षेत्र में पेयजल की समस्या बहुत बढ़ गई है। नल सूखे पड़े हैं और टैंकर समय पर नहीं आ रहे। नगर निगम अधिकारी को इस स्थिति से अवगत कराते हुए लगभग 80 शब्दों में एक ई-मेल कीजिए ।	**1x5=5**
15.	**(क)** "जल संरक्षण" के महत्व को बताने और लोगों को प्रेरित करने के लिए जल संसाधन मंत्रालय की ओर से लगभग 40 शब्दों में एक आकर्षक विज्ञापन तैयार कीजिए। **अथवा** **(ख)** आपके विद्यालय की वार्षिक पत्रिका प्रकाशित हुई है। प्राचार्य को इस अवसर पर बधाई देते हुए लगभग 40 शब्दों में एक बधाई संदेश लिखिए।	**1x4=4**

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

SECTION – A (Multiple Choice Questions)		
Q. No.	**Marking scheme**	**Marks**
Q1.	C	**1**
Q2.	A	**1**
Q3.	B	**1**
Q4.	D	**1**
Q5.	D	**1**
Q6.	D	**1**
Q7.	B	**1**
Q8.	D	**1**
Q9.	D	**1**
Q10.	D	**1**
Q11.	B	**1**
Q12.	D	**1**
Q13.	B	**1**
Q14.	A	**1**
Q15.	D	**1**
Q16.	D	**1**
Q17.	B	**1**
Q18.	C	**1**

Q19.	**C**	**1**
Q20.	A	**1**

SECTION – B (Very Short Answers)		
Q. No.	**Marking scheme**	**Marks**
Q21.	for correct proof	**2**
Q22.	**i) AA similarity ii) CPST**	**1mark each**
Q23.	**For proving** perimeter of ΔABC = 2AP perimeter of ΔABC= 24cm	**1.5** **0.5**
Q24.	a+b=1, ab=-2, Sum = 2a-1 + 2b-1= 0, product= 4ab-2a-2b+1=-9 Poly+ x^2-9	**0.5** **1** **0.5**
Q25.	For finding zeroes -2, 9/2 For verification	**1** **1**

SECTION – C (Short Answers)		
Q. No.	**Marking scheme**	**Marks**
Q26.	**OR** (Let no of rows=y, no of students in each row=x) -2x+y=2,3x-y=3 For solving x= 5, y=12, total students= 60	 **1** **2**
Q27.	**$\sin^2 A$**+$\text{cosec}^2 A$ + 2 +$\cos^2 A$+$\sec^2 A$+2 1+2+2+1+ $\cot^2 A$+1+$\tan^2 A$ 7+ $\tan^2 A$+ $\cot^2 A$	 **2.5** **0.5**
Q28.	For given, to prove figure	**1**

	For correct proof	**2**
Q29.	i) 1/9 ii) 6/36=1/6 iii) 1	
Q30.	13(7 x 11+1)= 13x 78= 2x3x13x13 so its composite No. 5(1008+1)= 5x 1009 so composite Or For correct proof	**1.5** **1.5** **3**
Q31.	For forming correct eq[($x+6)^2 - x^2 = 468$] For finding nos as 36 and 42.	**2** **1**

SECTION – D **(Long Answers)**		
Q. No.	**Marking scheme**	**Marks**
Q32.	**For given, to prove, contruction, figure** For correct proof	**2** **3**
Q33.	**For** correct figure Ht of chimney= h+40 m, ht of tower=40m, distance= x m For solving h=√3x , x= 40√3 m H=120m, yes	**1** **1** **1+1** **1**
Q34.	fi+f2=18, ∑xf= 1940 +30 fi+70f2. For calculating fi= 8, f2=10 OR For correct table including formula For calculating x=3, y=6	**1+2** **2** **2** **3**
Q35.	Height of cone= radius of cone =radius of hemisphere=4cm vol of toy= vol of cone+ vol of hemisphere for correct formula and finding vol as 1408/7 or 201.14 cu cm. for finding difference as 310.86 cu cm.	**1** **2** **2**

SECTION – E **(Case-study Based Questions)**		
Q. No.	**Marking scheme**	**Marks**
Q36.	i) H(1,5), G(5,1) ii) Q iii) √194 or (7,7.5)	**1** **1** **2**

Q37.	i)a= 5000, d=2200 ii) production during 8^{th} yr= 20400. Iii) 21600 or 12^{th} yr.	**1** **1** **2**
Q38.	i)154 sq m. ii) 314 sq m or 86 sq m. iii) Rs 2200	**1+2+1**

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

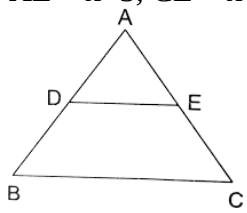
Maximum marks:80 **Time:3 hours**

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

1. **This question paper contains 38 questions. All Questions are compulsory.**
2. This Question Paper is divided into 5 Sections A, B, C, D and E.
3. In Section A, Question numbers 1-18 are multiple choice questions (MCQs) and question no.19 and 20 are Assertion- Reason based questions of 1 mark each.
4. In Section B, Question numbers 21-25 are very short answer (VSA) type questions, carrying 02 marks each.
5. In Section C, Question numbers 26-31 are short answer (SA) type questions, carrying 03 marks each.
6. In Section D, Question numbers 32-35 are long answer (LA) type questions, carrying 05 marks each.
7. In Section E, Question numbers 36-38 are case study-based questions carrying 4 marks each with sub parts of the values of 1, 1 and 2 marks each respectively.
8. There is no overall choice. However, an internal choice in 2 questions of Section B, 2 questions of Section C and 2 questions of Section D has been provided. An internal choice has been provided in all the 2 marks questions of Section E.
9. Draw neat and clean figures wherever required. Take π = 22/7 wherever required if not stated.
10. Use of calculators is not allowed.

SECTION – A
(Multiple Choice Questions)
Each MCQ of 1mark, has four options with only one correct option, choose the correct option

Q.No.	Question	Marks
Q1.	Roots of the quadratic equation $6x^2 - x - 2 = 0$ are: a) 2/3 , 1/2 b) -2/3, -1/2 c) 2/3,-1/2 d) -2/3, 1/2	**1**
Q2.	Zeros of quadratic polynomial $x^2 + x - 20$ are (a)4, - 5 (b)-4,5 (c)-4,-5 (d) 4,5	**1**
Q3.	Condition for no real roots for a quadratic equation $ax^2+bx+c = 0$ is a)$b^2-4ac > 0$ b) $b^2-4ac < 0$ c) $b^2-4ac = 0$ d) $b-4ac < 0$	**1**
Q4.	A pair of linear equation will have unique solution if: a)$a_1a_2 + b_1b_2 \neq 0$ b) $a_1a_2 - b_1b_2 \neq 0$ c) $a_1b_2 + a_1b_2 = 0$ d) $a_1b_2 - a_2b_1 \neq 0$	**1**
Q5.	If zeroes of a quadratic polynomial are reciprocal of each other than a) a= b b) b=c c) a=c d) ac=1	**1**
Q6.	If 12, a , b and 24 are in A.P. then the value of a and b is: a)14,18 b) 16,18 c) 18,20 d)16,20	**1**
Q7.	The distance of the point (3,-4) from the x axis is: a) 3 units b) 4 units c) 5 units d) -4 units	**1**

Q8.	If the distance between the points (p, – 5) and(2,7) is 13 units, then the value of 'p' is a)-3,-7 b) 3, -7 c)3, 7 d) -3, 7	**1**
Q9.	Evaluate (secA +tan A) (1 – sin A) (a)secA (b)sin A (c)cosecA (d) cosA	**1**
Q10.	A tangent PQ at a point P of a circle of radius 5 cm meets a line through The centre O at a point Q so that OQ=12 cm. Length PQ is : (a)12cm (b) 13 cm (c) 8.5cm (d)$\sqrt{119}$cm	**1**
Q11.	$9\sec^2 A - 9\tan^2 A$ = (a)1 (b) 9 (c) 8 (d)0	**1**
Q12.	The area of the circle that can be inscribed in a square of side 6cm is: (a)$36\pi cm^2$ (b)$18\pi cm^2$ (c)$12\pi cm^2$ (d)$9\pi cm^2$	**1**
Q13.	If at some time, the length of the shadow of a tower is $\sqrt{3}$ times its height, then the angle of elevation of the sun, at that time is: (a)15° (b)30° (c)45° (d) 60^o	**1**
Q14.	If the sum of the circumferences of two circles with radii R_1 and R_2 is equal to circumference of a circle of radius R, then (a) $R_1+R_2=R$ (b)$R_1+R_2>R$ (c) $R_1+R_2<R$ (d)$R_1+R_2=2R$	**1**
Q15.	In a ΔABC, DE ‖BC, find the value of x if AD = x, BD = x+1, AE = x+3, CE = x+5  (a)2 (b) 5 (c)10 (d) 3	**1**
Q16.	For the following distribution the sum of lower limits of the median class and modal class is **Class** | 60 – 70 | 70 – 80 | 80 – 90 | 90 – 100 | 100 – 110 **Frequency** | 10 | 15 | 12 | 20 | 9 a.190 b. 160 c. 180 d. 170	**1**
Q17.	A box contains 5 blue balls, x white balls and 4 red balls. If a ball is drawn at random from the box, the probability of getting a white ball is 1/4, then the value of x is a) 4 b) 3 c) 5 d) 6	**1**
Q18.	If sin(A+B) =1 and cos(A-B) = 1/2then the value of B is: a) 30^0 b) 60^0 c) 15^0 d) 45^0	**1**

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

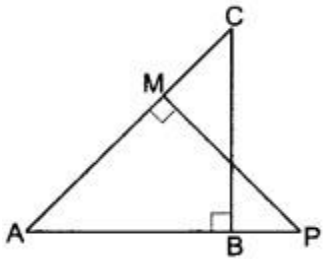
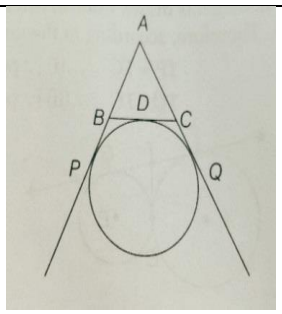
A) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).

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

C) Assertion (A) is true but reason (R) is false. D) Assertion (A) is false but reason (R) is true. **Only one of which is the correct answer.**		
Q19.	**ASSERTION (A): I**f the value of mode and mean is 60 and 66 respectively then the value of median is 64 **REASON (R):** median = mode + 2 mean	**1**
Q20.	**ASSERTION (A)**: The HCF of two numbers is 5 and their product is 150, then their LCM is 30 **REASON (R):** For any two positive integers a and b, HCF (a,b) XLCM(a,b)= a x b.	**1**

SECTION – B
(Very Short Answers)

This section comprises of VSA of 2 marks each

Q. No.	Question	Marks
Q21.	Prove that $\sqrt{5} - 3$ is irrational. Where $\sqrt{5}$ is irrational.	**2**
Q22.	In given Fig. ΔABC and ΔAMP are two right triangles right-angled at B and M respectively. Prove that: ΔABC~ΔAMP **OR** Prove that : CA/PA = BC/MP 	**2**
Q23.	Find the perimeter of ΔABC, if AP =12cm. 	**2**
Q24.	If a and b are the zeroes of the quadratic polynomial $f(x) = x^2-x-2$, find a polynomial whose zeroes are (2a-1) and (2b-1).	**2**

	OR Find the zeroes of the polynomial $2x^2$ -5x -18 and verify the relationship between zeroes and coefficient.	
Q25.	Find the value of a so that the two equations will have no solution. (2a-1) x + 3y = 1 , 3ax + 6y = -2.	**2**

SECTION – C
(Short Answers)

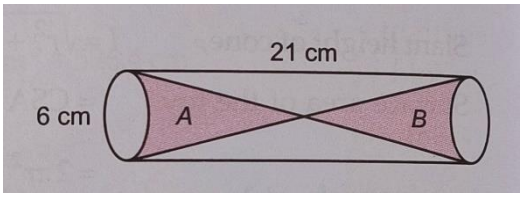
This section comprises of SA of 3 marks each

Q. No.	**Question**	**Marks**
Q26.	Students are made to stand in rows. If one student is extra in a row there would be 2 rows less. If one student is less in a row there would be 3 rows more. Find the number of students in the class.	**3**
Q27.	Prove that $(\sin A + \text{cosec}A)^2+(\cos A + \sec A)^2=7 +\tan^2 A +\cot^2 A$	**3**
Q28.	Prove that length of tangents drawn from an external point to a circle are equal. **OR** Prove that the parallelogram circumscribing a circle is a rhombus.	**3**
Q29.	Two dice are thrown simultaneously at random. Find the probability of getting (i) product 6 (ii) sum atleast10 (iii) sum less than or equal to 12.	**3**
Q30.	Explain why 7 x11 x13+13 and 7x6 x5x4x 3 x2x1+5 are composite numbers? **OR** Prove that √3 is irrational.	**3**
Q31.	Sum of area of two squares is 468 sq m. if the difference of their perimeters is 24m, find the length of the the sides of the square.	

SECTION – D
(Long Answers)

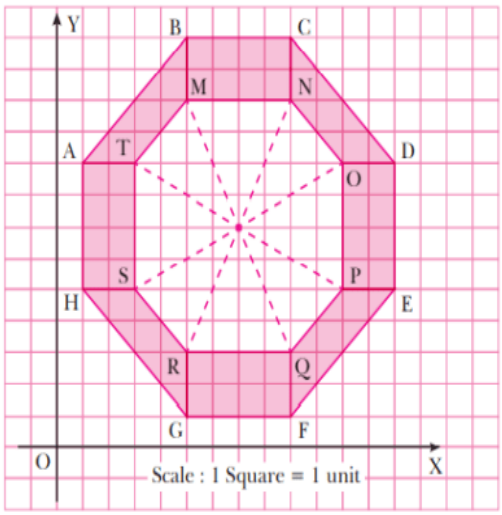
This section comprises of LA type questions of 5 marks each

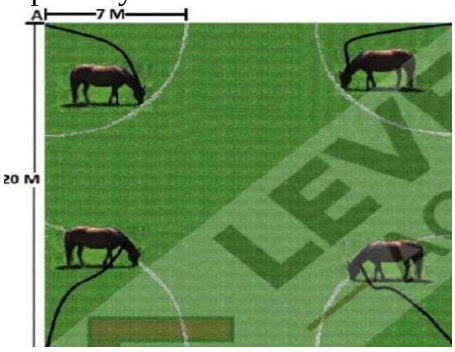
Q. No.	**Question**	**Marks**
Q32.	State and Prove Basic proportionality theorem.	**5**
Q33.	According to pollution control norms the minimum height of smoke emitting chimney should be 100m.This norm is to reduce air pollution and to maintain	**5**

	the air quality so that we can inhale fresh oxygen without any pollutant everyone should follow this norm. Angle of elevation of the top of a chimney from the top of a tower is 60^0 and the angle of depression of the foot of the chimney from the top of the tower is 30^0. If height of the tower is 40m, find the height of the chimney. State if the above mentioned chimney meets the pollution norms.	
Q34.	The mean of the following frequency distribution is 57.6 and the sum of the observations is 50. Find themissingfrequencies$f_1$and $f_{2..}$ Class | 0-20 | 20-40 | 40-60 | 60-80 | 80-100 | 100-120 | Total Frequency | 7 | f_1 | 12 | f_2 | 8 | 5 | 50 OR If the median of the following data is 32.5. Find the values of x and y. Class Interval | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | Total Frequency | x | 5 | 9 | 12 | y | 3 | 2 | 40	**5**
Q35.	A solid toy is in the form of a hemisphere surmounted by a right circular cone. The height of the cone is 4 cm and diameter of the base is 8 cm . Determine the volume of the toy. If the cube just encloses the toy, then find the difference of the volume of cube and the toy. **OR** Two solid cones A and B are placed in a cylindrical tube as shown in the figure. The ratio of their capacities is 2:1. Find the heights and capacities of cones. Also, find the volume of the remaining portion of the cylinder.  	**5**

SECTION – E
(Case-study Based Questions)

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

Q. No.	Question	Marks
Q36.	Octagonal kitchen tables come with an incredible shape that's perfect for small, cozy living spaces. They create an intimate ambiance better than any other table shape. In anyone's home, a busy place is usually the dining or kitchen area.The top of a table is shown in the figure given below:  Based on the above information, answer the following questions. i) The coordinates of the points H and G are respectively ii) If G is taken as the origin, and x , y axis put along GF and GB, then the point denoted by coordinate (4,2) is **OR** What is the distance between the points A and B iii) Find the coordinates of the mid-point of line segment joining points M and Q.	1 1 2
Q37.	India is competitive manufacturing location due to the low cost of manpower and strong technical and engineering capabilities contributing to higher quality production runs. The production of TV sets in a factory increases uniformly by a fixed number every year. It produced 16000 sets in 6^{th} year and 22600 in 9^{th} year. **Based on the above information, answer the following questions** (i) Find the production during 8^{th} year. (ii) Find the production during first 3 years. (iii) In which year, the production is Rs 29,200. OR (iii) Find the difference of the production during 7^{th} year and 4^{th} year.	**1** **1** **2**

Q38.	A stable owner has four horses. He usually tie these horses with 7m long rope to pegs at each corner of a square shaped gross field of 20m length, to graze in his farm. But tying with rope sometimes results in injuries to his horses, so he decided to build fence around each horse and let them freely move and graze separately in their own area.  Based on the above, find the following: (i).The total area of the field in which these horses can graze. (π=22/7) (ii).If the length of the rope is increased to10 m, find the area in which these horses can graze. (iii) What is the area of the field that is un-grazed after increasing the length of the rope? OR (iii).If the length of the rope is increased as per part (ii) above, find the cost of fencing if the cost of fencing is Rs 250 per m.	**1** **1** **2**

Pre – Board Examination (2025-26)
Class- X
Subject- Mathematics (Basic)- Code No- 241

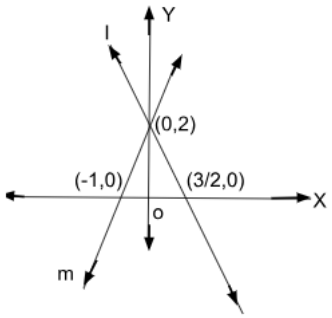
Time: 3 hours **MM - 80**

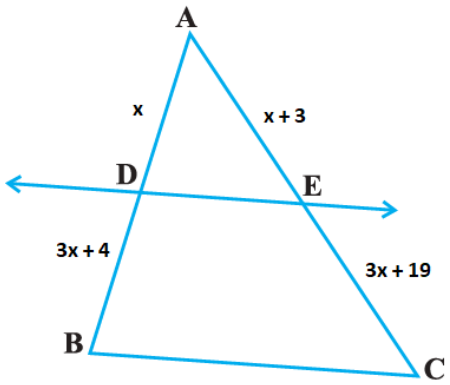
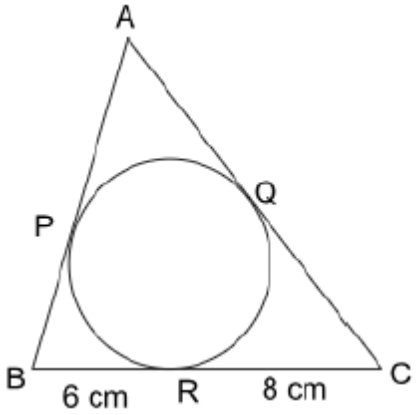
General Instructions:
Read the following instructions carefully and follow them:

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, Questions no. 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, Questions no. 21-25 are very short answer (VSA) type questions, carrying 02 marks each.
5. In Section C, Questions no. 26-31 are short answer (SA) type questions, carrying 03 marks each.
6. In Section D, Questions no. 32-35 are long answer (LA) type questions, carrying 05 marks each.
7. In Section E, Questions no. 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 Question 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.
10. Take π =22/7 wherever required if not stated.
11. Use of calculators is not allowed.

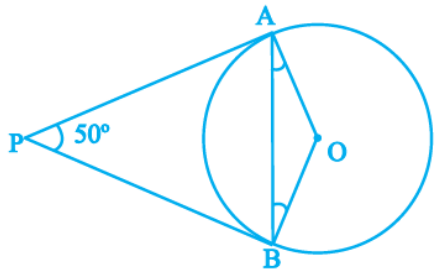
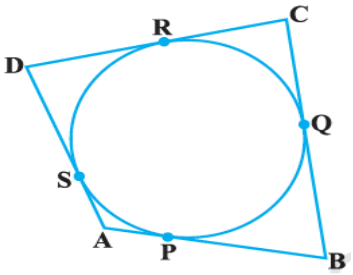
SECTION - A

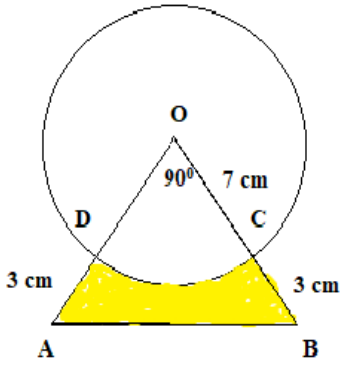
Section A consists of 20 questions of 1 mark each.

Q.No.	Questions	Marks
1	If two positive integers p and q can be expressed as $p = ab^2$ and $q = a^3b$; a, b being prime numbers, then LCM (p, q) is (A) ab (B) a^2b^2 (C) a^3b^2 (D) a^3b^3	1
2	The system of linear equations represented by the lines l and m is  (A) consistent with unique solution (B) inconsistent (C) consistent with three solutions (D) consistent with many solutions	1
3	If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2, then the value of k is (A) 10 (B) -10 (C) 5 (D) –5	1
4	For what value of k does$(k – 12)x^2 + 2 (k – 12) x + 2 = 0$ have equal roots. (A) 10 (B) 12 (C) 14 (D) 16	1
5	If the first three terms of an AP are 3p-1, 3p+5 and 5p+1 respectively, then the value of 'p' is (A) 2 (B) -3 (C) 4 (D) 5	1

6	The first term of AP is 5 and the last term is 45. If the sum of all the terms is 400, the number of terms is: (A) 20 (B) -16 (C) 14 (D) 16	1
7	The distance between the points (a,b) and (-a,-b) is (A) $\sqrt{a^2+b^2}$ (B) $a^2 + b^2$ (C) $2\sqrt{a^2+b^2}$ (D) $4\sqrt{a^2+b^2}$	1
8	The vertices of a parallelogram in order are A(1,2), B(4, y), C(x, 6) and D(3,5). Then (x, y) is (A) (6,3) (B) (3,6) (C) (5,6) (D) (1,4)	1
9	If ΔABC~ΔDEF, AB = 4 cm, DE = 6 cm and EF = 9 cm and FD = 12 cm, then the perimeter of ΔABC is (A) 18 cm (B) 20 cm (C) 22 cm (D) 24 cm	1
10	Find the value of x for which DE ∥ BC in the given figure. (A) 1 (B) 2 (C) 3 (D) 4 	1
11	The probability of guessing the correct answer to a certain test question is $\frac{x}{6}$. If the probability of not guessing the correct answer to this question is $\frac{2}{3}$, then the value of '**x**'is: (A) 2 (B) 3 (C) 4 (D) 6	1
12	If perimeter of given triangle is 38 cm, then length AP is equal to  (A) 19 cm (B) 5 cm (C) 10 cm (D) 8 cm	1
13	Two dice are rolled simultaneously. What is the probability that 6 will come up at least once? (A) $\frac{1}{36}$ (B) $\frac{7}{36}$ (C) $\frac{11}{36}$ (D) $\frac{13}{36}$	1
14	If the mean of first 'n' natural numbers is $\frac{5n}{9}$, then n is equal to (A) 9 (B) 5 (C) 10 (D) 11	1
15	If two tangents inclined at an angle of 60° are drawn to a circle of radius 3cm, then the length of each tangent is equal to (A) $\frac{3\sqrt{3}}{2}$ (B) 3 cm (C) 6 cm (D) $3\sqrt{3}$ cm	1

16	For the following distribution: Class: 0-5 | 5-10 | 10-15 | 15-20 | 20-25 Frequency: 10 | 15 | 12 | 20 | 9 The lower limit of the median class is (A) 15 (B) 25 (C) 30 (D) 10	1
17	If the area of a sector of circle of radius 36 cm is 54π cm^2, then the length of the corresponding arc of the sector is: (A) 8π cm (B) 6π cm (C) 4π cm (D) 3π cm	1
18	If $\sin\theta + \cos\theta = \sqrt{2}$, then $\tan\theta + \cot\theta =$ (A) 1 (B) 2 (C) 3 (D) 4	1
	DIRECTION: In the question number 19 and 20, a statement of **Assertion (A)** is followed by a statement of **Reason (R)**. Choose the correct option **(A)**Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A) **(B)**Both assertion (A) and reason (R) are true and reason (R) is not the correct explanation of assertion (A) **(C)**Assertion (A) is true but reason (R) is false. **(D)**Assertion (A) is false but reason (R) is true. Chose any one option-	
19	**Assertion(A) :** If PA and PB are tangents drawn from an external point P to a circle with centre O, then the quadrilateral AOBP is cyclic. **Reason (R) :** The angle between two tangents drawn from an external point to a circle is supplementary to the angle subtended by the line segment joining the points of contact at the centre.	1
20	**Assertion(A):** If the ratio of the height of a pole and its shadow is $\sqrt{3} : 1$, then the Sun's altitude is 30^0. **Reason (R) :** In a right triangle, $\tan\theta = P/B$, where P stands for perpendicular (side opposite to angle θ) and B for base (adjacent side).	1
	SECTION B	
	Section B consists of 5 questions of 2 marks each.	
S.No	Questions	**Marks**
21	What is the discriminant of the quadratic equation $7\sqrt{3}x + 10x - \sqrt{3} = 0$? Hence tell the nature of roots.	2
22	Find the largest number which on dividing 1251, 9377 and 15628 leaves remainders 1,2 and 3 respectively. **OR** Explain whether $3 \times 12 \times 101 + 4$ is a prime number or composite number .	2
23	If α, β are zeroes of quadratic polynomial $x^2 - (k+6)x + 2(2k-1)$, find **'k'** if $\alpha + \beta = \frac{1}{2}\alpha\beta$.	2
24	If $\sin(A - B) = \frac{1}{2}$ and $\cos(A + B) = \frac{1}{2}$, $0° < A + B < 90°$, $A > B$, find A and B. **OR** If $\tan A = 1$ and $\tan B = \sqrt{3}$, evaluate $\cos A \cos B - \sin A \sin B$	2

25	In Fig., if PA and PB are tangents to the circle with centre O such that ∠APB = 50°, then find ∠OAB. 	2
	SECTION C	
	Section C consists of 6 questions of 3 marks each.	
S.No	Questions	**Marks**
26	Prove that $(\sqrt{2} + \sqrt{3})$ is an irrational number, given that $\sqrt{6}$ is an irrational number.	3
27	Prove that AB+CD=AD+BC, for a quadrilateral ABCD circumscribing a circle. 	3
28	Raveesh scored 40 marks in a test, getting 3 marks for each right answer and losing 1 mark for each wrong answer. Had 4 marks been awarded for each correct answer and 2 marks been deducted for each incorrect answer, then Raveesh would have scored 50 marks. How many questions were there in the test? OR Draw the graphs of the pair of linear equations $x - y + 2 = 0$ and $4x - y - 4 = 0$. Hence find the solution of above pair of linear equations in two variables using graph.	3
29	Find the sum of all three- digit numbers which are divisible by 5.	3
30	If $x \sin^3\theta + y \cos^3\theta = \sin\theta \cos\theta$ and $x \sin\theta = y \cos\theta$, prove $x^2 + y^2 = 1$.	3
31	The following table shows the ages of the patients admitted in a hospital during a year: **Age (in years)** | 5-15 | 15-25 | 25-35 | 35-45 | 45-55 | 55-65 **Number of patients** | 6 | 11 | 21 | 23 | 14 | 5 Find the mode of the data given above. **OR** Find the value of 'p' , if the mean is 7.5. **Class Interval** | 2-4 | 4-6 | 6-8 | 8-10 | 10-12 | 12-14 **Frequency** | 6 | 8 | 15 | p | 8 | 4	3
	SECTION D	
	Section D consists of 4 questions of 5 marks each.	
S.No	Questions	**Marks**
32	State and prove ***"Basic proportionality theorem"***.	5

33	A train covers a distance of 360 km at a uniform speed. Had the speed been 5km/hour more, it would have taken 48 minutes less for the journey. Find the original speed of the train. **OR** Some students arranged a picnic. The budget for food was Rs 240. Because four students of the group failed to go, the cost of food to each student got increased by Rs 5. How many students attended the picnic?	5
34	Due to heavy floods in a state, thousands were rendered homeless. 50 schools collectively decided to provide place and the canvas for 1500 tents and share the whole expenditure equally. The lower part of each tent is cylindrical with base radius 2.8 m and height 3.5 m and the upper part is conical with the same base radius, but of height 2.1 m. If the canvas used to make the tents costs ₹120 per m^2, find the amount shared by each school to set up the tents.	5
35	Two poles of equal heights are standing opposite to each other on either side of the road which is 80 m wide. From a point P between them on the road, the angles of elevation of the top of the poles are 60^0 and 30^0 respectively. Find the height of each pole and distances of the point P from the poles. **OR** The angle of elevation of a jet plane from a point on the ground is 60^0. After a flight of 15 seconds, the angle of elevation changes to 30^0. If the jet plane is flying at a constant height of $1500\sqrt{3}$ m, find the speed of jet plane.	5
	SECTION E	
	Case study based questions are compulsory. This section comprises of 3 case-study based questions of 4 marks each with three sub-parts	
S.No	Questions	**Marks**
36	In an annual day function of a school, the organizers wanted to give a cash prize along with a memento to their best students. Each memento is made as shown in the figure and its base ABCD is shown from the front side. The rate of silver plating is Rs. 20 per cm^2. (i) What is the area of quadrant ODCO? (ii) Find the area of triangle AOB. (iii) What is the total cost of silver plating of the shaded part ABCD? Or What is the perimeter of sector ODC ?  	1 1 2
37	Computer based learning (CBL) refers to any teaching methodology that makes use of computers for information transmission. At an elementary school level, computer applications can be used to display multimedia lesson. A survey was done on 1000 elementary and secondary schools of Assam and they were classified by the number of computers they had.	

Number of computers	1 - 10	11 - 20	21 - 50	51 - 100	101 and more
Number of schools	250	200	290	180	80

One school is chosen at random. Then **find the probability** of:

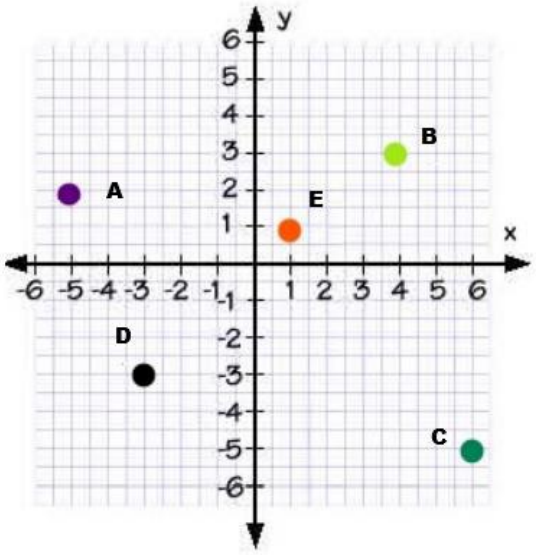
(i) that the school chosen at random has more than 100 computers. — 1

(ii) that the school chosen at random has 50 or fewer computers. — 2

OR

that the school chosen at random has not more than 20 computers.

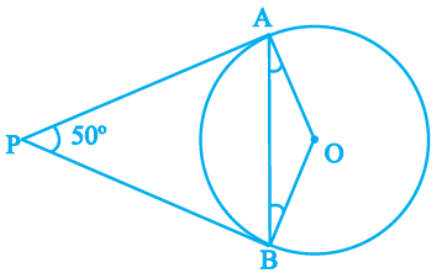
(iii) that the school chosen at random has 10 or less than 10 computers — 1

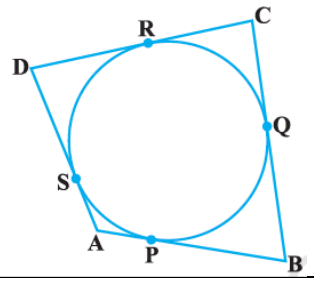
38	A group of students named Ria, Emma, Anna, Krish and Sahil are gathered around in the school library, in their library period. The coloured plot points(A, B, C, D and E) on the coordinate plane shown in the above image indicate the dots where each book is available. Considering point O as the origin. The books with respect to points are: Science guide –at point A, Maths guide at point B, English guide at point D, History guide –at point E and Sanskrit guide at point C. (i) How much distance does Emma has to walk to get the Science guide, if her starting pointis (0, 2)? (ii) How far apart are the English and Sanskrit guide? **OR** The distance between the location of History guide and Sahil's starting point (which is at origin) is- (iii) What type of triangle ADE is? 	1 2 1

Pre – Board Examination (2025-26)
Class- X

Subject- Mathematics(Basic) 241 – Marking Scheme

	Section A consists of 20 questions of 1 mark each.	
S.NO		Marks
1	(C) a^3b^2	1
2	(A) consistent with unique solution	1
3	(B) -10	1
4	(C) 14	1
5	(D) 5	1
6	(D) 16	1
7	(C) $2\sqrt{a^2+b^2}$	1
8	(A) (6,3)	1
9	(A) 18 cm	1
10	(B) 2	1
11	(A) 2	1
12	(B) 5 cm	1
13	(C) 11/36	1
14	(A) 9	1
15	(D) $3\sqrt{3}$ cm	1
16	(D) 10	1
17	(D) 3π cm	1
18	(B) 2	1
19	**(A)** Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)	1
20	**(D)** Assertion (A) is false but reason (R) is true.	1
	SECTION B	
	Section B consists of 5 questions of 2 marks each.	
S.No		**Marks**
21	$D = b^2 - 4ac$ $= 10^2 - 4 \times (-\sqrt{3}) \times 7\sqrt{3}$ $= 184$ $D > 0$, Real and distinct roots.	½ ½ ½ ½
22	$1251 - 1 = 1250$, $9377 - 2 = 9375$, $15628 - 3 = 15625$ $1250 = 2 \times 5^4$ $9375 = 3 \times 5^5$ $15625 = 5^6$ HCF $= 5^4 = 625$ **OR** $3 \times 12 \times 101 + 4 = 4(3 \times 3 \times 101 + 1)$ $= 4(909 + 1)$ $= 4 \times 910$ $= 2 \times 2 \times 2 \times 5 \times 7 \times 13$ is a product of prime, hence a composite number.	½ 1 ½ ½ ½ ½

23	$\alpha + \beta = -\frac{b}{a} = k + 6$ $\alpha\ \beta = \frac{c}{a} = 2(2k-1)$ Now $\alpha + \beta = \frac{1}{2}\alpha\beta$ $k + 6 = \frac{1}{2} x\ 2(2k-1)$ k = 7	½ ½ ½ ½
24	Since, sin (A – B) = 1/2 Therefore, A – B = 30° ----------(1) Also, cos (A + B) = 1/2 So, A + B = 60° ----------(2) Solving (1) and (2), ∠A = 45° and ∠B = 15° **OR** tan A = 1 so A = 45^0 tan B = $\sqrt{3}$ so B = 60^0 Then cos 45^0 cos 60^0 – sin 45^0 sin 60^0 = (1/.$\sqrt{2}$) x (1/2) - (1/.$\sqrt{2}$) x ($\sqrt{3}$/2) = $\frac{1-\sqrt{3}}{2\sqrt{2}}$	½ ½ 1 ½ 1 ½
25	Quadrilateral OAPB ∠O + ∠A + ∠P + ∠B = 360^0 ∠O + 90^0 + 50^0 + 90^0 = 360^0 ∠O = 130^0 ΔOAB is isosceles as OA = OB SO, ∠OAB = ∠OBA ----------1 Now ∠OAB + ∠OBA + ∠AOB = 180^0 ∠OAB + ∠OAB + 130^0 = 180^0 ∠OAB = 25^0  	1 ½ ½
	SECTION C	
	Section C consists of 6 questions of 3 marks each.	
S.No		**Marks**
26	Let suppose that √2 + √3 is rational. Let √2 + √3 = *a* , where *a* is rational. Therefore, √2 = *a* - √3 Squaring on both sides, we get $2 = a^2 + 3 - 2a\sqrt{3}$ Therefore, √3 = $\frac{a^2+1}{2a}$ which is a contradiction as the right hand side is a rational number while √3 is irrational. Hence, √2 + √3 is irrational.	½ ½ ½ ½ ½ ½
27		

	AP = AS…….(1) BP = BQ……(2) CR = CQ ……...(3) DR = DS……(4). Adding (1), (2), (3) and (4) we get AP+BP+CR+DR = AS+BQ+CQ+DS (AP+BP) + (CR+DR) = (AS+DS) + (BQ+CQ) ∴ AB+CD=AD+BC 	 1 1 1
28	Let number of right answers and wrong answers be x and y resp. ATQ 3x – y = 40-----1 4x – 2y = 50 2x – y = 25-----2 Subtracting both equations 1 and 2 x = 15 Putting x = 15 in equation 2 30 – y = 25 y = 5 So, right answers 15 and wrong answers 5. Total questions = 15+5 = 20 **OR** Correct table of values for x and y Correct graph plotting Solution (2, 4).	½ ½ ½ ½ ½ ½ 1 1 ½ ½
29	AP: 100, 105, 110, 115, ……..,995 Now $a_n = a + (n-1)d$ $995 = 100 + (n-1)x5$ $n = 180$ $S_n = \frac{n}{2}(a + l)$ $= \frac{180}{2}(100 + 995)$ $= 98550$	1 1 1
30	$x \sin^3\theta + y \cos^3\theta = \sin\theta \cos\theta$ ----(1) and $x \sin\theta = y \cos\theta$ ------(2) Now from (1) $(x\sin\theta)\sin^2\theta + (y\cos\theta)\cos^2\theta$ $= (x\sin\theta)\sin^2\theta + (x\sin\theta)\cos^2\theta$ $= x \sin\theta (\sin^2\theta + \cos^2\theta)$ $= x \sin\theta$ So, $x \sin\theta = \sin\theta \cos\theta$ $\cos\theta = x$ This implies $y = \sin\theta$ (from 2) So $x^2 + y^2 = \cos^2\theta + \sin^2\theta = 1$	 ½ ½ ½ ½ ½ ½
31	Mode maximum class frequency is 23 belonging to class interval 35 - 45. Modal class = 35 - 45 Lower limit (l) of modal class = 35 Frequency (f_1) of modal class = 23 Class size (h) = 10 Frequency (f_0) of class preceding the modal class = 21 Frequency (f_2) of class succeeding the modal class = 14	 1

Mode = $l + \left(\frac{f_1 - f_0}{2f_1 - f_0 - f_2} \right) \times h$ ½

= $35 + \left(\frac{23 - 21}{2 \times 23 - 21 - 14} \right) \times 10$ ½

= 35 + 1.818 ½

= 36.82 years ½

OR

C.I	**FRE.(f_i)**	**X_i**	**$F_i X_i$**
2-4	6	3	18
4-6	8	5	40
6-8	15	7	105
8-10	p	9	9p
10-12	8	11	88
12-14	4	13	52
	$\Sigma f_i = p + 41$		$\Sigma F_i X_i = 303 + 9p$

1

MEAN (X) = $\frac{\Sigma Fi\ Xi}{\Sigma fi}$

7.5 = $\frac{303+9p}{p+41}$ 1

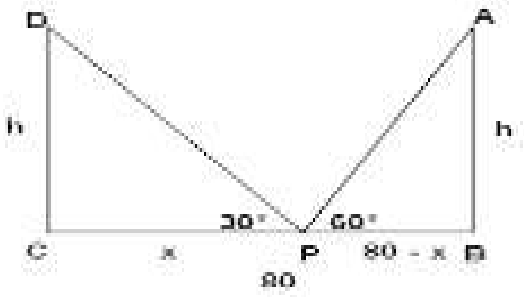
7.5(p + 41) = 303 + 9p

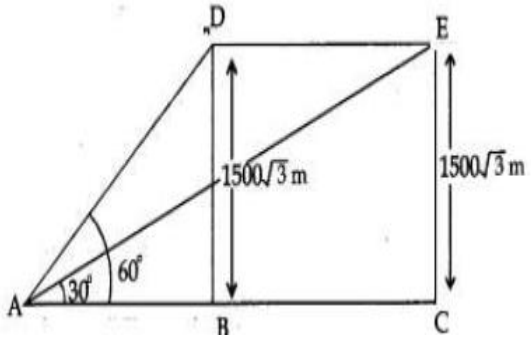
7.5p + 307.5 = 303 + 9p

p = 3 1

Section D consists of 4 questions of 5 marks each.

S.No		**Marks**
32	Statement of BPT,	1
	Given , To prove, figure, construction	1 ½
	Correct proof	2 ½
33	Let the usual speed of train be x km/hr and the increased speed of the train be (x+ 5) km/hr	½
	Distance =360 km [Given] According to the question, (time taken at original speed) - (time taken at increased speed) = 48 minutes = (48/60) hours.	
	$\frac{360}{x} - \frac{360}{x+5} = \frac{48}{60}$	1
	Which on simplification gives: $x^2 + 5x - 2250 = 0$	1
	$x^2 + 50x - 45x - 2250 = 0$	½
	$x(x + 50) - 45(x + 50) = 0$	½
	$(x-45)(x+50) = 0$	½
	$x = 45$ or $x = -50$	½
	But speed cannot be negative. ∴ The original speed is 45 km/hr	½
	OR	
	Let the number of students who originally planned the picnic = x	
	Original budget for food per student = $\frac{240}{x}$	½
	Number of students who actually went for picnic = x -4	½
	Increased cost of food for each student = $\frac{240}{x-4}$	½
	ATQ	

	$\frac{240}{x-4} - \frac{240}{x} = 5$ On simplifying $x^2 - 4x - 192 = 0$ $x^2 - 16x + 12x - 192 = 0$ $x(x-16) + 12(x-16) = 0$ $(x-16)(x+12) = 0$ $x - 16 = 0$ or $x + 12 = 0$ $x = 16$ or $x = -12$....[Rejecting negative value as number of students cannot be -ve $\therefore$ Number of students who originally planned for the picnic = 16 Number of students who actually went for picnic = 12	1 1 1 ½
34	Radius of the base of cylinder (r) = 2.8 m = Radius of the base of the cone (r) Height of the cylinder (h)=3.5 m Height of the cone (H)=2.1 m. Slant height of conical part (l)=$\sqrt{r^2+H^2}$ = $\sqrt{(2.8)^2+(2.1)^2}$ = $\sqrt{7.84+4.41}$ = $\sqrt{12.25}$ = 3.5 m Area of canvas used to make tent = CSA of cylinder + CSA of cone = $2\times\pi\times2.8\times3.5 + \pi\times2.8\times3.5$ = 61.6+30.8 = 92.4m^2 Cost of 1500 tents at ₹120 per sq.m = $1500\times120\times92.4$ = 16,632,000 Share of each school to set up the tents = 16632000/50 = ₹3,32,640	½ 1 ½ 1 1 ½ ½
35	Let AB and CD be the two poles of equal height and their heights be **h** m. BC be the 80 m wide road. P be any point on the road. Let **CP** be x m, therefore **BP** = (80 − x) . Also, $\angle APB = 60^0$ and $\angle DPC = 30^0$ In ΔDCP, $\tan30^0 = CD/CP$ $\Rightarrow h/x = 1/\sqrt{3}$ $\Rightarrow x = h\sqrt{3}$ − − − − − − − − − − (1) In Δ ABP, $\tan60^0 = AB/BP$ $h/(80-x) = \sqrt{3}$ $\Rightarrow h = \sqrt{3}(80-x)$ $\Rightarrow x/\sqrt{3} = \sqrt{3}(80-x)$ ----------from (1) $\Rightarrow x = 3(80-x)$ $\Rightarrow x = 240-3x$ $\Rightarrow x+3x = 240$	 1(fig) 1 1 1 ½ ½

	$\Rightarrow 4x = 240$ $\Rightarrow x = 60$ $\therefore$ Height of the pole, $h = x/\sqrt{3} = 60/\sqrt{3} = 20\sqrt{3}$ m. Thus, position of the point P is 60 m from C and 20 m from point B . Height of each pole is $20\sqrt{3}$ m.	1(fig)
	OR  	1 ½
	Let D and E be the initial and final positions of the plane respectively In $\triangle$ABD, $\tan 60^0 = BD/AB$ $\Rightarrow \sqrt{3} = 1500\sqrt{3}/AB$ $\Rightarrow$ AB = 1500 m In $\triangle$ACE, $\tan 30^0 = CE/AC$ $\Rightarrow 1/\sqrt{3} = 1500\sqrt{3}/AC$ $\Rightarrow$ AC = 4500 m $\therefore$ BC = AC − AB = 4500 − 1500 = 3000 m DE = BC = 3000 m i.e., the plane travels a distance of 3000 m in 15 seconds. $\therefore$ speed of the plane = Distance/ time = 3000/15 = 200 m/s or 720 km/hr	1 ½ ½ ½
	SECTION E	
	Case study based questions are compulsory.	
36	(i) area of quadrant = $(90^0/360^0) \times (22/7) \times 7 \times 7 = 38.5$ cm^2 (ii) side of right angled triangle AOB = 7 + 3 = 10 cm area of triangle AOB = ½ x 10 x 10 = 50 cm^2 (iii)Total cost = area of shaded part x 20 = (50 – 38.5) x 20 = Rs 230 Or Perimeter = $(90^0/180^0) \times (22/7) \times 7 + 2 \times 7$ = 11 + 14 = 25 cm	1 1 1 1 1 1
37	(i) P = 80/1000 = 2/25 (ii) No. of schools having 50 or fewer computers = 250+200+290 = 740 P = 740/ 1000 = 37/50 **OR** No. of schools having not more than 20 computers = 250 + 200 = 450 P = 450/1000 = 9/20 (iii) P = 250/1000 = 1/4	1 1 1 1 1 1
38	a)5 unit	1

	b)$\sqrt{85}$ units or $\sqrt{2}$ units c)Scalene triangle(method to be shown)	2 1

PRE-BOARD EXAMINATION (2025-26)

Class:10 Subject & Subject Code: Science Theory, 086 Time: 3 hours Maximum marks- 80

MARKING SCHEME

Q.NO.	ANSWERS	MARKS
1	B- Carbon dioxide is released during the process	1
2	D- Thin walled capillaries richly supplied with blood	1
3	D- It is growth related movement.	1
4	D- Features will remain the same even if the protein changes.	1
5	C – Part Y did not grow at all.	1
6	C- It utilizes 10% of light energy and transfers the rest to the next trophic level.	1
7	B- Enrichment of oxygen in atmosphere	1
8	C- A is true but R is false.	1
9	A- Both A and R are true, and R is the correct explanation of A	1
10	Gall bladder normally stores and concentrates bile to break down fats, a process that is disrupted after removal. Without the gallbladder, bile is released directly and continuously into the small intestine, making it harder for the body to digest large amounts of fat. Eating excessive oily foods can overwhelm the digestive system, leading to symptoms like gas, bloating etc..	2
11	A. It is a slow process that cannot quickly transport oxygen throughout the large, complex human body. In multicellular organisms, most cells are not in direct contact with the external environment, and the distances oxygen needs to travel are too vast for diffusion alone to be effective. **OR** B. (i) Pulmonary vein (ii) Superior and inferior vena cava	2 1 1
12	Grass- 20000J 10% of the energy at one trophic level is transferred to the next level. (Proper explanation)	1 1
13	A reflex action is an automatic, involuntary response to a stimulus that does not involve the conscious part of the brain. Correct flow chart	1 2
14	four types of gametes (RY, Ry, rY, ry) when self-pollinated. The F2 generation exhibits a 9: 3: 3:1 phenotypic ratio for round yellow: round green: wrinkled yellow: wrinkled green seeds, respectively, meaning 81 round yellow, 27 round green, 27 wrinkled yellow, and 9 wrinkled green saplings	1 1 1
15	(i) A- Pyruvate, B- Ethanol, C- Absence of oxygen in muscle cells, D- Mitochondria **OR** (ii) (a) Plants*:* Glucose is produced by plants themselves via the process of photosynthesis where they convert carbon dioxide and water into glucose and oxygen using sunlight. (b)Animals*:* Glucose is obtained by animals through the digestion of carbohydrates (like starch) present in the food they eat. (iii) Muscles undergo anaerobic respiration during heavy exercise which produces	½ x 4 1 1

	lactic acid. This lactic acid builds up and causes muscle fatigue and cramps. (iv) Aquatic organisms breathe in water, which contain less oxygen compared to air. To obtain sufficient oxygen, they need to breathe faster or have specialized structures (like gills) with a large surface area. Terrestrial organisms breathe air which has more oxygen, so their breathing rate is comparatively slower.	1 1
16	A. (i)Sperm formation would be adversely affected because it requires a lower temperature than the body temperature. (ii)passage for the transfer of sperms is plugged hence no sperm transport occurs. (iii) they will not add secretions for nourishment and medium for the transport of sperms. (iv)when egg is not fertilized, it lives only for one day. Then, the thickened lining of uterus breaks leading to the discharge of blood and mucous along with unfertilized egg (called menstruation) (v)Nutrition and oxygen will not be provided to the growing embryo affecting its growth, also harmful waste products will accumulate. **OR** B.(i) Testes are located in a sac called the scrotum. This external location is crucial because the cooler temperature of the scrotum is necessary for the proper development of sperm. Functions: Testes are to produce sperm for reproduction and to produce male hormones, primarily testosterone (ii) If an egg is fertilized, it travels to the uterus and implants in the uterine lining, which has thickened in preparation for pregnancy. (iii) In males, this is a vasectomy, where the vas deferens (sperm-carrying tubes) are cut and sealed. In females, it is a tubectomy or tubal ligation, where the fallopian tubes are cut and sealed to prevent the egg from reaching the uterus.	1 each ½ + ½ ½ + ½ 1 1 1
17	D. There should be physical contact between the reactants.	1
18	C. Zinc and Hydrogen	1
19	A- (i) impure (ii) cathode	1
20	C. Milk of magnesia > blood > wine	1
21	D- Basic →acidic →basic	1
22	B- Wash the hand immediately with plenty of water and apply a paste of sodium hydrogencarbonate.	1
23	C-2,3,1,3	1
24	D. A is false but R is true.	1
25	'A' is Potassium (K) or Sodium (Na), 'B' is Magnesium (Mg) or Calcium (Ca), 'C' is Iron(Fe) and 'D' is Gold (Au) (any other correct answer)	½ X 4
26	A-(i) The greenish colour is a result of corrosion, a chemical reaction where copper reacts with oxygen, moisture, and carbon dioxide in the atmosphere.	1

	This forms a protective layer is a mixture of basic copper carbonate and copper hydroxide. (ii) Replacing them with iron domes is not advisable because iron rusts (weakening the structure) and requires constant maintenance. (iii) Ancient architects used copper because it is malleable, ductile, and available in thin sheets, allowing it to be easily shaped into domes. **OR** (i) (a) Mercury is extracted from cinnabar (HgS) by heating it in air to form mercury (Hg), which is then condensed (or related equations) (b) Copper is extracted from its sulphide ore (Cu_2S) by roasting to form copper(I) oxide (Cu_2O) and copper(I) sulphide (Cu_2S), which then react to yield copper (or related equations) (ii) Exposed silver articles form a black coating of silver sulphide (Ag_2S).	 1 1 1 1 1
27	Correct equations	1 each
28	(i)X is Gypsum (Calcium sulphate dihydrate) and 'Y' is Plaster of Paris (Calcium sulphate hemihydrate). (ii) 'X' (Gypsum) can be re-obtained from 'Y' (Plaster of Paris) by adding water to it. $CaSO_4 \cdot ½H_2O + 1½H_2O \rightarrow CaSO_4 \cdot 2H_2O$ **OR** (ii)X- $CaSO_4 \cdot 2H_2O$, Y- $CaSO_4 \cdot ½H_2O$ (iii) Making toys and decorative items Making statues and figurines	½ + ½ 1+1 ½ + ½
29	A-(i) test tube III (ii) Salt A is soap; salt B is detergent. (Or any other correct name/ formula) (iii) Presence of bicarbonates, chlorides and sulphates of calcium and magnesium in water make it hard. (iv) The insoluble substance formed is scum. It forms because the calcium and magnesium salts present in hard water react with soap to create insoluble calcium and magnesium salts of fatty acids. This reaction consumes soap, preventing it from producing foam and hindering the cleaning process. **OR** B- (i) correct structure (ii) CO_2 and H_2O (iii) When 5% solution of alkaline potassium permanganate is added to warm ethanol, a chemical reaction occurs where the ethanol is oxidized to ethanoic acid.(½) Correct structure alkaline potassium permanganate ($KMnO_4$) acts as a strong oxidizing agent (iv) When ethanol is heated with excess concentrated sulphuric acid (H_2SO_4) at 443 K, a dehydration reaction occurs, resulting in the formation of ethene.	1 1 1 1+1 1 ½ + 1/2 ½ 1 ½ 1
30	C- (ii), (iii) and (iv)	1
31	B- II	1
32	A- Both A and R are true, and R is the correct explanation of A.	1

33	Since the image is real and same size. The position of image should be at 2f. It is given that the image of the needle is formed at a distance of 50 cm from the convex lens. Hence, the needle is placed in front of the lens at a distance of 50 cm. Object distance, u=−50cm Image distance, v = 50 cm Focal length = f According the lens formula, 1/v−1/u=1/f 1/f=1/50−1/(−50)=1/50+1/(50)=1/25 f = 25 cm = 0.25 cm Power of lens, P =1/f (in meters) =1/0.25 = +4D	1 1
34	Energy used by TV set, $E_1 = P_1 \times t_1$ = 250 X 1= 250 W h Energy used by the toaster, $E_2 = P_2 \times t_2$ = 1200x 10/60= 200 W h Thus, TV set uses more energy. **OR** (i) The highest total resistance can be secured by series combination and is equal to, $R_{Series} = 4+8+12+24 = 48$ Ohm (ii) The lowest total resistance can be secured by parallel combination, 1/ R= 1/4+ 1/8+ 1/12+ 1/24 = ½ R parallel= 2 Ohm	1 1 1 1
35	(i) Presbyopia (ii) Causes- weakening of ciliary muscles (iii) Corrected by using bifocal lens- top part concave and bottom part convex	1/2 1 ½ +½ +½
36	A- Insulator- e.g. rubber or any other suitable example B- Alloy- e.g. Nichrome or any other C- Conductor- e.g. copper or any other	½ + ½ ½ + ½ ½ + ½
37	(i) P- North pole, Q- South pole (ii) Magnetic field lines emerge from north pole and merge into south pole outside the magnet and inside the magnet, the direction is from south pole to the north pole. (iii) Magnetic field lines are parallel and equidistant	½ x 2 1 1
38	(i) Mirror A, as the object is placed beyond the centre of curvature of the mirror hence the concave mirror will form a real, inverted and diminished image between C and F.	½ + ½ ½ + ½

	(ii) Real, inverted, same size as the object (any 2) (iii) Virtual, erect and enlarged image is formed behind the mirror Correct diagram **OR** Here, f= -12 cm, u= -18 cm Using mirror formula, 1/f= 1/v+ 1/u v= -36 cm	1+1 1 1
39	A- (i) Tungsten is used for electric lamp filaments due to its very high melting point and high resistivity. (ii)Alloys are used in heating devices because they have higher resistivity and are less prone to burning at high temperatures. (iii) Series circuits are avoided in homes because they divide voltage, do not allow independent appliance operation, and cause all devices to fail if one breaks. (iv) A wire's resistance is inversely proportional to its cross-sectional area, meaning more area equals less resistance. (v) Copper and aluminum are used for electricity transmission because they have low resistivity, which means they are excellent conductors with minimal energy loss. And they are not costly as well. **OR** B-(i) Working of a fuse Working of electric iron and water heater (ii) 1 Kw h= 1 kW x 1 hr = 3.6 x10 ^{6} J (iii) R= ρl/A The material of both the wires and the length of both the wires is same , so the resistance of the wire will be inversely proportional to the area of cross section of the wires. Wire with shorter diameter will offer higher resistance. Hence, wire with diameter 0.2 mm will offer more resistance than wire with 0.3 mm diameter.	1 each ½ + ½ 2 1 1

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

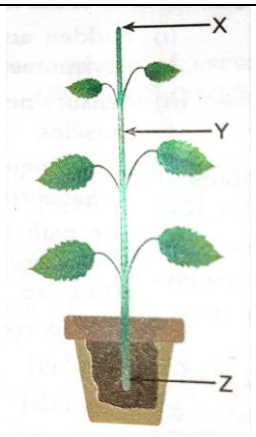
Time allowed:3 hours **Max. Marks: 80**

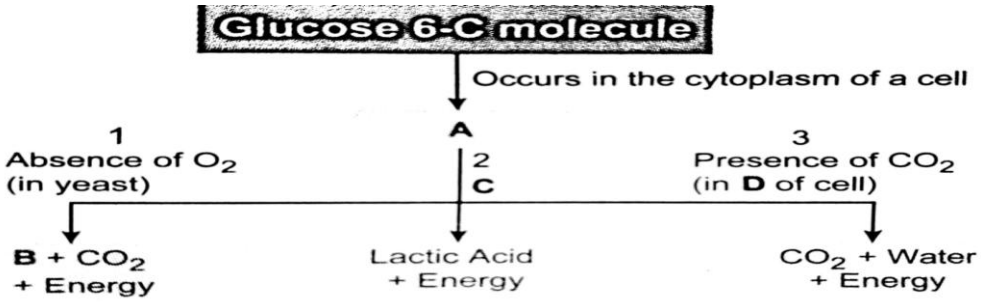
Instructions:

(i) This question paper consists of 39 questions in 3 sections. Section A is Biology; Section B is Chemistry and Section C is Physics.

(ii) All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.

Q.No.	**Section-A**	Marks
1	One of the events that does not occur during photosynthesis is: A. Chlorophyll absorbs solar energy. B. Carbon dioxide is released during the process. C. Oxygen is released during the process. D. Carbon dioxide is absorbed during the process.	1
2	What is common between the extensive network of blood vessels around walls of alveoli and in the glomerulus of nephron? A. Thick walled arteries richly supplied with blood. B. Thin walled veins poorly supplied with blood. C. Thick walled capillaries poorly supplied with blood. D. Thin walled capillaries richly supplied with blood.	1
3	Select from the following the correct statement about tropic movement in plants: A. It is due to the stimulus of touch and temperature. B. It does not depend upon the direction of stimulus received. C. It is observed only in the roots and not in the stem. D. It is a growth related movement.	1
4	Which of the following statements is NOT true? A. DNA carries the information for inheritance of features from parents to the next generation. B. DNA is the information source for making proteins. C. Change in the information leads to different proteins. D. Features will remain the same even if the protein changes.	1

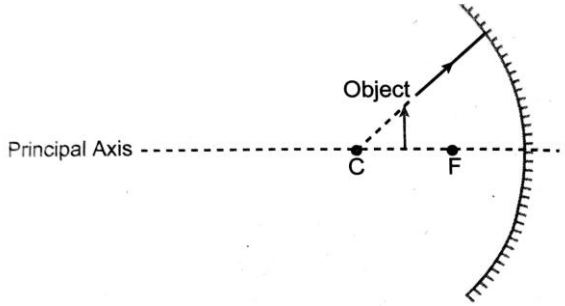
5	 Shown in the figure alongside is a plant in which auxin is synthesized at part X of the plant. Geeta took the potted plant and cut off part X. She then took the plant and kept it near a window with sunlight and observed it after 7 days. Which of the following is she likely to have observed? A. Part Y grew and bent towards the window. B. Part Z started growing upwards and out of the soil. C. Part Y did not grow at all. D. Part Y grew upwards.	1
6	Identify the incorrect statement : "The energy available to the producers is maximum" because: A. It is the first trophic level which absorbs one percent of light energy directly from the source. B. It utilizes most of the chemical energy for its own respiration, growth, reproduction, movement etc. C. It utilizes 10% of light energy and transfers the rest to the next trophic level. D. It transfers only 10% of light energy to the next tropic level.	1
7	Which of the following is not a role of decomposers in the ecosystem? A. Natural replenishment of soil B. Enrichment of Oxygen in atmosphere C. Waste decomposition D. Breakdown of dead remains	1
The following two questions consist of two statements Assertion (A) and Reason (R). Answer these questions by selecting the appropriate option given below: 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.		
8	**Assertion(A):** An ecosystem consists of biotic and abiotic components. **Reason (R)**: Biotic and abiotic components play important roles for the sustenance of life and work independently in all the ecosystems.	1
9	**Assertion(A):** The sex of the child in human beings will be determined by the type of chromosome he/she inherits from the father. **Reason (R):** A child who inherits 'X' chromosome from his father would be a girl (XX), while a child who inherits a 'Y' chromosome from the father would be a boy (XY).	1

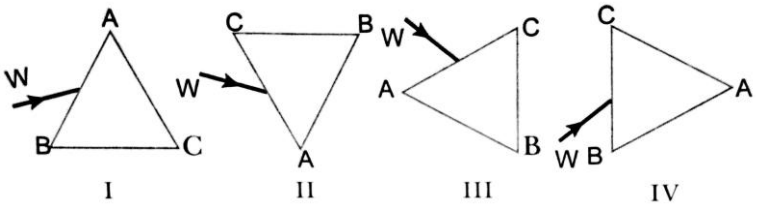
10	Patients whose gall bladder is removed are recommended to eat less oily food. Why?	2
11	**Students to attempt either option A or B** **A.** Why is diffusion insufficient to meet the oxygen requirements of multi-cellular organisms like humans? **OR** **B.** Name the blood vessel that brings – (i) oxygenated blood and (ii) deoxygenated blood to the human heart.	2
12	In the following food chain, only 2 J of energy was available to the peacocks. How much energy would have been present in Grass? Justify your answer. GRASSHOPPER FROG SNAKE PEACOCK	2
13	Define reflex action. With the help of a flow chart show the path of a reflex action such as withdrawing your hand upon touching a hot object.	3
14	In a genetic experiment, plants with pure round green seeds (RRyy) were crossed with plants with wrinkled yellow seeds (rrYY). (i) Show the gametes formed when F1 was self-pollinated. (ii) A total of 144 seeds were produced which developed into saplings. Show the ratio in which these traits are independently inherited in these144 sapling.	3
15	Study the following flow chart showing the breakdown of glucose by various pathways. In this flow chart, in four blocks some blanks are given as: A, B, C and D.  ***Attempt either subparts (i) or (ii)*** (i) Write the names of A, B, C and D. **OR** (ii) Write the source of glucose molecule involved in cellular respiration in (a) plants (b) animals. (iii) Why do athletes sometimes suffer from muscle cramps during running? (iv) Give reason why the rate of breathing in aquatic organisms is faster than in terrestrial organisms.	4

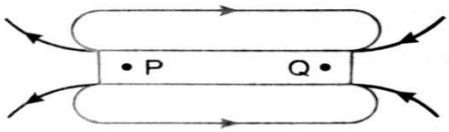
16	**Attempt either option A or B** **A.** Given below are certain situations. Analyse and describe its possible impact on a person: (i) Testes of a male boy are not able to descend into scrotum during his embryonic development. (ii) Vas deferens of a man is plugged. (iii) Prostrate and seminal vesicles are not functional. (iv) Egg is not fertilized in a human female. (v) Placenta does not attach to the uterus optimally. **OR** **B.** (i) Where are testes located in the human males and why? State two functions of the testes. (ii) In the human female, one of the ovaries releases an egg every month. State the changes that take place if the egg is fertilized. (iii) What is done during the surgical method in males and females to prevent pregnancy?	5
	Section- B	
17	Which of the following is a necessary condition for all the chemical reactions? A. The reactants should be in the same state. B. Energy should be supplied to the reactants. C. The reactants should be at the same temperature. D. There should be physical contact between the reactants.	1
18	A metal 'X' on treatment with sodium hydroxide liberates a gas 'G'. It also liberates the same gas 'G' on treatment with dilute sulphuric acid. Based on the above information, 'X' and 'G' respectively are: A. Copper and Sulphur dioxide B. Zinc and Sulphur dioxide C. Zinc and Hydrogen D. Copper and Hydrogen	1
19	Read the following paragraph and fill in the blanks by selecting the correct option. Copper is refined through a process called electrolytic refining. During the process, when current is passed through the electrolyte the (i)___ metal from the anode dissolves into the electrolyte. An equivalent amount of pure metal from the electrolyte is deposited on the (ii)____ . A. (i) impure; (ii) cathode B. (i) impure; (ii) anode C. (i) pure; (ii) cathode D. (i) pure; (ii) anode	1

20	Preeti has to arrange the following in decreasing order of hydroxide ion concentration. Wine (pH 4.0), milk of magnesia (pH 10.5), blood (pH 7.4). Which of the following arrangements is correct? A. Wine > milk of magnesia > blood B. Blood > milk of magnesia > wine C. Milk of magnesia > blood > wine D. Wine > blood > milk of magnesia	1
21	An aqueous solution 'A' turns phenolphthalein solution pink. When another aqueous solution 'B' is added to the pink solution, the pink colour disappears. Now when a few drops of solution 'A' are added to this reaction, the mixture appears pink again .The respective changes in the nature of the solution are from: A. Acid →basic →basic B. Basic →acidic →acidic C. Acidic →basic →acidic D. Basic →acidic →basic	1
22	If a few drops of a concentrated acid accidentally spills over the hand of a student, what should be done? A. Wash the hand with saline solution. B. Wash the hand immediately with plenty of water and apply a paste of sodium hydrogen carbonate. C. After washing with plenty of water, apply a solution of sodium hydroxide on the hand. D. Neutralize the acid with a strong alkali.	1
23	Consider the following chemical reaction: p Al + q H_2O → r Al_2O_3 + s H_2 To balance this chemical equation, the values of 'p','q','r' and 's' must be respectively : A.3,2,2,1 B.2,3,3,1 C.2,3,1,3 D. 3,1,2,2	1
	The following question consists of two statements Assertion (A) and Reason (R). Answer these questions by selecting the appropriate option given below: 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.	
24	**Assertion(A):** The combustion of hydrocarbons results in the evolution of oxygen and hydrogen gases. **Reason (R):** Energy is also released in the form of heat and light during the combustion process.	1

25	A metal 'A' reacts violently with cold water and the gas evolved catches fire. Another metal 'B' when dipped in water starts floating. The metal 'C' does not react either with cold or hot water, but reacts with steam. The metal 'D' does not react with water at all. Identify A,B,C and D.	2
26	***Attempt either option A or B*** **A.** The domes of many buildings in Europe are made of copper. These domes now appear greenish in colour. (i) Why do the domes appear greenish though copper is orange-red in colour? (ii) In your opinion, should the copper domes be replaced by iron domes to overcome the problem of change of colour of copper domes? (iii) Domes used to be made from thin sheets of metals. Why did the ancient architects use copper to make domes? **OR** **B**. (i) State the process of extracting (a) mercury from its ore called cinnabar, and (b) copper from its sulphide ore. (ii) Silver articles slowly lose its shiny surface when exposed to air. Name the compound formed on silver articles in the form of coating.	3
27	Write one equation each for decomposition reactions where energy is supplied in the form of heat, light or electricity.	3
28	On heating 'X' at 373 K, it loses water molecules and becomes 'Y'. 'Y' is a substance which doctors use for supporting fractured bones in the right position. (i) Identify 'X' and 'Y'. (ii) How can 'X' be re-obtained from 'Y'? Write the chemical reaction involved in the process. **OR** (ii)Write down the formula of 'X' and 'Y' (iii) Write any two uses of 'Y' other than those mentioned above.	4
29	***Attempt either option A or B*** **A.** 'A' and 'B' are two salts used for washing purposes. Salt A is used for bathing also. Four test tubes I, II, III and IV as mentioned below are taken. I. Rain water + solution of salt 'A' II. Rain water + solution of salt 'B' III. Tubewell water + solution of salt 'A' IV. Tubewell water + solution of salt 'B' The test tubes are shaken one by one almost identically for the same time and the lengths of foam formed in each test tube are noted.	5

	(i) In which one of the four test tubes is the foam formed, the minimum? (ii) Differentiate between salt A and salt B (any 1 point). (iii) What is the cause of hardness of water? (iv) Sometimes it is observed that while bathing foam is formed with difficulty and an insoluble substance is formed. Name this substance and write the cause of its formation. **OR** **B.** Ethanol (commonly known as alcohol) is an important carbon compound widely used in industries, hospitals, etc. Because it is a very good solvent, it is used in medicines such as cough syrups, tincture iodine and many tonics. As it is a cleaner fuel, ethanol is used as an additive in petrol in most of the developed countries of the world. (i) Write the structure of ethanol. (ii) Name the products formed when ethanol burns in sufficient air (oxygen). (iii) State what happens when 5% solution of alkaline potassium permanganate is added to warm ethanol. Draw the structure of the product formed and state the role of 5% solution of alkaline potassium permanganate in the reaction. (iv) State what happens when ethanol is heated with excess conc. H_2SO_4 at 443 K.	
	Section- C	
30	While looking at the diagram below, Nalini concluded the following:  (i) the image of the object will be a virtual one. (ii) the reflected ray will travel along the same path as the incident ray but in opposite direction. (iii) the image of the object will be inverted. (iv) this is a concave mirror and hence the focal length will be negative. Which one of the above statements are correct? (A) (i) and (ii) (B) (i) and (iii) (C) (ii), (iii) and (iv) (D) (i), (ii), (iii) and (iv)	1
31	A prism ABC (with BC as base) is placed in different orientations. A narrow beam of white light is incident on the prism as shown in fig. In which of the following cases after dispersion does the third colour from the top correspond to the colours of the sky?	1

	 A. I B. II C. III D. IV	
	The following question consists of two statements Assertion (A) and Reason (R). Answer these questions by selecting the appropriate option given below: 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.	
32	**Assertion (A):** The centre of curvature is not a part of the mirror. It lies outside its reflecting surface. **Reason (R):** The reflecting surface of a spherical mirror is a part of a sphere. This sphere has a centre.	1
33	A convex lens forms a real and inverted image of a needle at a distance of 50 cm from the lens. Where is the needle placed in front of the convex lens if the image is equal to the size of the object? Also, find the power of the lens.	2
34	***Attempt either option A or B*** A. Calculate and show that which uses more energy, a 250 W TV set in 1 hr or a 1200 W toaster in 10 minutes? **OR** B. What is (i) the highest, (ii) the lowest total resistance that can be secured by combinations of four coils of resistance 4 Ω, 8 Ω, 12 Ω, 24 Ω?	2
35	A person may suffer from both myopia and hypermetropia defects during old age. (i)What is this condition called? (ii)Why does it happen? (iii) Write the name of the corrective lens and the position of the two lenses in spectacles used.	3

36	The electrical resistivity of three materials A, B and C at 20 °C is given below: **Material** / **Resistivity (Ωm)** A / 10^{17} B / 44×10^{-6} C / 1.62×10^{-8} (i) Classify these materials as conductor, alloy and insulator. (ii) Give one example of each of these materials.	3
37	(i) Name the poles P and Q of the magnets in the following figures 'a':  Figure 'a' (ii) State the inference drawn about the direction of the magnetic field lines on the basis of these diagrams. (iii) Why is the strength of the magnetic field uniform inside a solenoid?	3
38	Study the data given below showing the focal length of three concave mirrors A, B and C and the respective distances of objects placed in front of the mirrors **Case** / **Mirror** / **Focal Length (cm)** / **Object Distance (cm)** 1 / A / 20 / 45 2 / B / 15 / 30 3 / C / 30 / 20 (i) In which one of the above cases will the mirror form a diminished image of the object? Justify your answer. (ii) List two properties of the image formed in case 2. (iii) What is the nature and size of the image formed by mirror C? Draw ray diagram to justify your answer. **OR** (iii) An object is placed at a distance of 18 cm from the pole of a concave mirror of focal length 12 cm. Find the position of the image formed in this case.	4

39	***Attempt either option A or B*** **A**- Explain the following: (i) Why is tungsten used almost exclusively for filament of electric lamps? (ii) Why are the conductors of electric heating devices, such as bread-toasters and electric irons, made of an alloy rather than pure metal? (iii) Why is the series arrangement not used for domestic circuits? (iv) How does the resistance of a wire vary with its area of cross-section? (v) Why are copper and aluminum wires usually employed for electricity transmission? **OR** **B**- (i) State two applications of Joule's heating. (ii) Establish the relationship between the commercial unit of electric energy and the SI unit of electric energy. (iii) Two wires A and B of the same material, having the same lengths and diameters of 0.2 mm and 0.3 mm respectively, are connected one by one in a circuit. Which one of these two wires offer more resistance to the flow of current in the circuit? Justify your answer.	5

MARKING SCHEME

अंकन योजना

SOCIAL SCIENCE(087)

सामाजिक विज्ञान(087)

CLASS -X(2025-26)

कक्षा -X(2025-26)

Time Allowed:3hrs Max.Marks:80

समय: 3 घंटे अधिकतम अंक: 80

1	a) Frankfurt Parliament **Visually impaired candidates -** b) The took part in the French revolution a.फ्रैंकफर्ट संसद **दृष्टिबाधित अभ्यर्थी -** b.फ्रांसीसी क्रांति में भाग लिया	1
2	c) (ii),(i),(iv) and(iii) c.(ii),(i),(iv) और(iii)	1
3	b) City of gold b) सोने का शहर	1
4	a)print popularised the idea of the enlightened thinkers. a)प्रिंट ने प्रबुद्ध विचारकों के विचार को लोकप्रिय बनाया ।	1
5A	The Spanish conqueror's most powerful weapon was not a conventional military weapon because- a) They used germs like smallpox which spread deep into the continent. b) America's original inhabitants had no immunity against these diseases that came from Europe. (Any two relevant points) स्पेनिश विजेता का सबसे शक्तिशाली हथियार कोई पारंपरिक सैन्य हथियार नहीं था क्योंकि- a) उन्होंने चेचक जैसे कीटाणुओं का प्रयोग किया जो महाद्वीप में गहराई तक फैल गए। b) अमेरिका के मूल निवासियों में यूरोप से आई इन बीमारियों के प्रति कोई प्रतिरक्षा नहीं थी। (कोई दो प्रासंगिक बिंदु)	2
	OR	
5B	a) Chinese noodles became Spaghetti in Europe. b) After Coloumbus found the Americas potatoes, maize, tomatoes, chillies were brought to Europe, Asia and Africa.	

	(Any two relevant points) a.चीनी नूडल्स यूरोप में स्पेगेटी बन गए। b.कोलंबस द्वारा अमेरिका की खोज के बाद आलू, मक्का, टमाटर, मिर्च को यूरोप, एशिया और अफ्रीका लाया गया। (कोई दो प्रासंगिक बिंदु)	
6A	Different social groups participated in the Civil Disobedience Movement with their own ideas of Swaraj. a) Worldwide trade depression affected the rich peasants. b) The poor peasants too could not pay rent and demanded for reduction in it. c) The business classes demanded protection against the import of foreign goods. (Any three relevant points) विभिन्न सामाजिक समूहों ने स्वराज के अपने-अपने विचारों के साथ सविनय अवज्ञा आंदोलन में भाग लिया। a) विश्वव्यापी व्यापार मंदी ने धनी किसानों को प्रभावित किया। b) गरीब किसान भी लगान नहीं दे पा रहे थे और उन्होंने लगान में कटौती की मांग की। व्यापारी वर्ग ने विदेशी वस्तुओं के आयात के विरुद्ध सुरक्षा की मांग की। (कोई तीन प्रासंगिक बिंदु)	3
	OR	
6B	a) History and fiction, folklore and songs, popular prints and symbols all played a part in the making of Nationalism. b) The identity of India came to be Visually associated with the image of Bharat Mata. c) During Swadeshi movement in Bengal a tricolour flag was designed. (Any three relevant points) a.इतिहास और कथा साहित्य, लोककथा और गीत, लोकप्रिय प्रिंट और प्रतीक सभी ने राष्ट्रवाद के निर्माण में भूमिका निभाई। b.भारत की पहचान भारत माता की छवि के साथ जुड़ गई। c.बंगाल में स्वदेशी आंदोलन के दौरान तिरंगा झंडा डिजाइन किया गया था। (कोई तीन प्रासंगिक बिंदु)	
7A	a) The ideas of la patrie and le citoyen emphasized this notion. b) The tricolour new French flag was replaced by the royal standard. c) Uniform laws were formulated for all its citizens under a Centralised administrative system. d) The body of active citizens elected the Estate General and it was renamed National assembly. e) New hymns were composed, oaths taken and martyr commemorated.	5

	a.ला पैट्री और ले सिटॉयन के विचारों ने इस धारणा पर जोर दिया। b.शाही ध्वज के स्थान पर तिरंगे वाले नए फ्रांसीसी ध्वज को अपनाया गया। c.एक केंद्रीकृत प्रशासनिक प्रणाली के तहत सभी नागरिकों के लिए एक समान कानून बनाए गए। d.सक्रिय नागरिकों के निकाय ने एस्टेट जनरल का चुनाव किया और इसका नाम बदलकर नेशनल असेंबली कर दिया गया। e.नये भजन रचे गये, शपथ ली गयी और शहीदों को याद किया गया।	
	OR	
7B	a) The Balkan was a region of geographical and ethnic variations comprising of modern day Romania,Bulgaria, Albania, Greece, Macedonia, Croatia etc. The inhabitants were called Slavs. b) The spread of romantic nationalism lead to its disintegration. c) Different Slavic nationalities struggled to define their identity. d) Balkan region became a region of intense conflicts over expansion of territory. e) At the same time the great Europian powers- Russia, Germany, England and Austro Hungary were keen on taking the control of Balkan. a.बाल्कन भौगोलिक और जातीय विविधताओं वाला क्षेत्र था जिसमें आधुनिक रोमानिया, बुल्गारिया, अल्बानिया, ग्रीस, मैसेडोनिया, क्रोएशिया आदि शामिल थे। यहाँ के निवासियों को स्लाव कहा जाता था। b.रोमांटिक राष्ट्रवाद के प्रसार ने इसके विघटन को जन्म दिया। c.विभिन्न स्लाव राष्ट्रीयताओं को अपनी पहचान परिभाषित करने के लिए संघर्ष करना पड़ा। d.बाल्कन क्षेत्र,क्षेत्र विस्तार को लेकर तीव्र संघर्ष का क्षेत्र बन गया। e.इसी समय महान यूरोपीय शक्तियां - रूस, जर्मनी, इंग्लैंड और ऑस्ट्रिया-हंगरी बाल्कन पर नियंत्रण पाने के लिए उत्सुक थे।	
8.1	Goa, in the mid sixteenth century. गोवा, सोलहवीं शताब्दी के मध्य में।	1
8.2	Private English Enterprise निजी अंग्रेजी उद्यम	1
8.3	i) Highly expensive and fragile. ii)had to be handled carefully. iii)could not be ready easily as the script was written in different styles. i) अत्यधिक महंगा और नाजुक. ii) सावधानी से संभालना होगा। iii) आसानी से तैयार नहीं हो सका क्योंकि स्क्रिप्ट अलग-अलग शैलियों में लिखी गई थी।	2

9	Marked on the map.(Answers to the questions for the V.I candidates are also the same though only naming of the locations is required) a) Champaran b) Nagpur मानचित्र पर चिह्नित। (**दृष्टिबाधित अभ्यर्थियों** के लिए प्रश्नों के उत्तर भी वही हैं, यद्यपि केवल स्थानों का नाम बताना आवश्यक है) a. चंपारण b.नागपुर	1+1=2
10	d)Mountains account for 30 percent of the total surface area of the country and provides facilities for agriculture and industry. d)पहाड़ देश के कुल सतह क्षेत्र का 30 प्रतिशत हिस्सा हैं और कृषि और उद्योग के लिए सुविधाएं प्रदान करते हैं।	1
11	c)atmospheric pressure c)वायुमंडलीय दबाव	1
12	a.Parts of the forests area called sacred groves are protected from interference. a) पवित्र उपवन (Sacred groves) कहे जाने वाले वन क्षेत्र के कुछ हिस्सों को हस्तक्षेप से बचाया जाता है।	1
13	d.Himalayan brown bear and Andaman teal d.हिमालयी भूरा भालू और अंडमानी टील	1
14	a)Dams have changed the Cropping pattern which has in turn increased the gap between the rich and the poor. a) बांधों ने फसल पद्धति को बदल दिया है जिसके परिणामस्वरूप अमीर और गरीब के बीच की खाई बढ़ गई है।	1
15	c.Kuls c.कुल्स	1
16	Mr."P" must cultivate Tea in Assam as the soil and climatic conditions in Assam are suitable to grow Tea. i) The Tea plant grows well in tropical and sub tropical climate. ii) Deep and fertile well drained laterite soil. iii) Tea bushes require a warm and moist frost free climate. (Any two relevant points) श्री "पी" को असम में चाय की खेती करनी चाहिए क्योंकि असम की मिट्टी और जलवायु परिस्थितियां चाय उगाने के लिए उपयुक्त हैं। i.चाय का पौधा उष्णकटिबंधीय और उपोष्णकटिबंधीय जलवायु में अच्छी तरह से बढ़ता है। ii.गहरी और उपजाऊ, अच्छी जल निकासी वाली लैटेराइट मिट्टी। iii.चाय की झाड़ियों को गर्म और नम, पाला रहित जलवायु की आवश्यकता होती है।	2

	(कोई दो प्रासंगिक बिंदु)	
17A	i)The railway lines and the tarmac of the roads are made from minerals. ii) Cars, buses, trains and aeroplane are manufactured from minerals. iii)The food we eat also contains minerals. iv)In all stages of development human beings have used minerals for their livelihood, decoration, festivities. v)Almost everything we use from a tiny pin to a towering building or big ships are all made from minerals. i)रेलवे लाइनें और सड़कों का तारकोल खनिजों से बनाया जाता है। ii) कारें, बसें, रेलगाड़ियाँ और हवाई जहाज खनिजों से निर्मित होते हैं। iii)हम जो भोजन खाते हैं उसमें भी खनिज होते हैं। iv) विकास के सभी चरणों में मानव ने अपनी आजीविका, सजावट, उत्सवों के लिए खनिजों का उपयोग किया है। v) एक छोटी सी पिन से लेकर एक विशाल इमारत या बड़े जहाज तक, लगभग हर चीज जिसका हम उपयोग करते हैं, सभी खनिजों से बनी हैं।	5
	OR	
17B	i.Mining activities release harmful particles into the air including dust sulphur dioxide and nitrogen oxide. ii.The dust and noxious fumes inhaled by miners make them vulnerable to pulmonary diseases. iii.The use of heavy Machinery and explosives in mining activities can create significant noise pollution. iv.Mining activities can also result in the displacement of local communities. v.Mining activities involve the use of heavy machinery and chemicals which can result in soil and water pollution. i) खनन गतिविधियों से धूल, सल्फर डाइऑक्साइड और नाइट्रोजन ऑक्साइड सहित हानिकारक कण हवा में फैलते हैं। ii) खनिकों द्वारा साँस के माध्यम से ली जाने वाली धूल और हानिकारक धुएँ के कारण वे फुफ्फुसीय रोगों के प्रति संवेदनशील हो जाते हैं। iii) खनन गतिविधियों में भारी मशीनरी और विस्फोटकों के उपयोग से काफी ध्वनि प्रदूषण हो सकता है। iv) खनन गतिविधियों के परिणामस्वरूप स्थानीय समुदायों का विस्थापन भी हो सकता है। v) खनन गतिविधियों में भारी मशीनरी और रसायनों का उपयोग शामिल होता है जिसके परिणामस्वरूप मृदा और जल प्रदूषण हो सकता है।	
18.1	Aluminium smelting is light resistant to corrosion a good conductor of heat, malleable and becomes strong when it is mixed with other metals.	1

	एल्युमीनियम प्रकाश प्रतिरोधी, संक्षारण प्रतिरोधी, ऊष्मा का अच्छा सुचालक, आघातवर्धनीय तथा अन्य धातुओं के साथ मिश्रित होने पर मजबूत हो जाता है।	
18.2	Bauxite is the raw material used in aluminium industry. It can be identified by its dark reddish colour and bulky nature. बॉक्साइट एल्युमीनियम उद्योग में इस्तेमाल होने वाला कच्चा माल है। इसे इसके गहरे लाल रंग और भारीपन से पहचाना जा सकता है।	1
18.3	a) Regular and cheap supply of electricity. b) An assured source of raw materials at a minimum cost. क) बिजली की नियमित एवं सस्ती आपूर्ति। ख) न्यूनतम लागत पर कच्चे माल का सुनिश्चित स्रोत।	2
19	i) Hirakud Dam Or Sardar Sarovar Dam ii) a- Kandla b- Chattarpati Shivaji Maharaj (Mumbai) c-Netaji Subhash Chandra Bose(Kolkatta) **Visually impaired candidates-** a-Sardar Sarovar Dam b- Kandla c)-Chattarpati Shivaji Maharaj (Mumbai) d-Netaji Subhash Chandra Bose(Kolkatta) i)हीराकुंड बांध या सरदार सरोवर बांध ii) a- कांडला b- छत्रपति शिवाजी महाराज (मुंबई) c-नेताजी सुभाष चंद्र बोस (कोलकाता) **दृष्टिबाधित अभ्यर्थी-** a-सरदार सरोवर बांध b- कांडला c- छत्रपति शिवाजी महाराज (मुंबई) d-नेताजी सुभाष चंद्र बोस (कोलकाता)	1+1+1=3
20	b)only I,III and IV are correct b) केवल I, III और IV सही हैं	1
21	d)Creation of an independent Tamil Eelam(state) d)एक स्वतंत्र तमिल ईलम (राज्य) का निर्माण	1
22	b)The central government is undermining the spirit of Federalism. Visually.Impaired b.China-Unitary b)केंद्र सरकार संघवाद की भावना को कमजोर कर रही है।	1

	दृष्टिबाधित अभ्यर्थी- b.चीन- एकात्मक	
23	c)A is true but R is false. c)A सत्य है लेकिन R असत्य है।	1
24	i)It enables people to directly participate in decision making. ii)Italy helps to inculcate the habit of democratic participation. iii)It reduces the burden on Centre and State government. (Any two relevant points) i) यह लोगों को निर्णय लेने में प्रत्यक्ष रूप से भाग लेने में सक्षम बनाता है। ii) इटली लोकतांत्रिक भागीदारी की आदत डालने में मदद करता है। iii) इससे केन्द्र और राज्य सरकार पर बोझ कम हो जाता है। (कोई दो प्रासंगिक बिंदु)	2
25	i)There is no official religion of the Indian state. ii)The constitution of India doesn't give special recognition to any religion. iii)The constitution of India has put a ban on any discrimination on the grounds of religion. (Any two relevant points) i)भारतीय राज्य का कोई आधिकारिक धर्म नहीं है। ii)भारत का संविधान किसी भी धर्म को विशेष मान्यता नहीं देता है। iii) भारत के संविधान ने धर्म के आधार पर किसी भी प्रकार के भेदभाव पर प्रतिबंध लगा दिया है। (कोई दो प्रासंगिक बिंदु)	2
26	i)Democracy ensures that decision making will be based on norms and procedure. ii) Every citizens has the right and means to examine the process of decision making which is called as transparency. iii)Democratic government are accountable, legitimate and transparent government. (Any three relevant points) i)लोकतंत्र यह सुनिश्चित करता है कि निर्णय मानदंडों और प्रक्रिया पर आधारित होंगे। ii) प्रत्येक नागरिक को निर्णय लेने की प्रक्रिया की जांच करने का अधिकार और साधन है जिसे पारदर्शिता कहा जाता है। iii) लोकतांत्रिक सरकारें जवाबदेह, वैध और पारदर्शी सरकारें होती हैं। (कोई तीन प्रासंगिक बिंदु)	3
27A	i) Lack of Internal democracy ii) Dynastic Succession iii) Money and muscle power iv) Lack of meaningful choices to the voters v) Negative politics i.आंतरिक लोकतंत्र का अभाव ii.राजवंशीय उत्तराधिकार iii.धन और बाहुबल iv.मतदाताओं के लिए सार्थक विकल्पों का अभाव v.नकारात्मक राजनीति	5
	OR	

27B	i)without political parties every candidate in the election will become independent. ii)as societies became large and complex they also need some agency to gather different views on various issues. iii)The rise of political parties is directly linked to the emergence of representatives democracies. iv)The government may be formed but it's utility will remain uncertain. v)The role of an opposition party in a democracy necessitates the existence of political parties. i) राजनीतिक दलों के बिना चुनाव में प्रत्येक उम्मीदवार स्वतंत्र हो जाएगा। ii) जैसे-जैसे समाज बड़े और जटिल होते गए, उन्हें विभिन्न मुद्दों पर अलग-अलग विचार एकत्र करने के लिए किसी एजेंसी की भी आवश्यकता पड़ी। iii) राजनीतिक दलों का उदय प्रत्यक्षतः प्रतिनिधि लोकतंत्र के उदय से जुड़ा हुआ है। iv)सरकार तो बन जाएगी लेकिन उसकी उपयोगिता अनिश्चित रहेगी। v)लोकतंत्र में विपक्षी दल की भूमिका के लिए राजनीतिक दलों का अस्तित्व आवश्यक है।	
28.1	Power sharing helps to reduce the possibility of conflicts between social groups. सत्ता की साझेदारी सामाजिक समूहों के बीच संघर्ष की संभावना को कम करने में मदद करती है।	1
28.2	Moral reason: In a democracy citizens have the right to be consulted on how they are to governed. नैतिक कारण: लोकतंत्र में नागरिकों को यह अधिकार है कि उनसे इस बारे में परामर्श किया जाए कि उन्हें किस प्रकार शासित किया जाए।	1
28.3	In Belgium all the benefits of economic development and education were given to Dutch speaking communities as well as French speaking minority. While in Srilanka the government adopted a series of majoritarian measures to establish Sinhala supremacy on Tamils. बेल्जियम में आर्थिक विकास और शिक्षा के सभी लाभ डच भाषी समुदायों के साथ-साथ फ्रेंच भाषी अल्पसंख्यकों को भी दिए गए। जबकि श्रीलंका में सरकार ने तमिलों पर सिंहली वर्चस्व स्थापित करने के लिए कई बहुसंख्यकवादी उपाय अपनाए।	2
29	d)All of the above d) उपरोक्त सभी	1
30	b)All final goods and services b)सभी अंतिम वस्तुएं और सेवाएं	1
31	a)Under employment a) अल्प बेरोजगारी	1
32	c)i,ii and iii c)i,ii और iii	1
33	a)because it acts as an intermediate in the exchange process. a) क्योंकि यह विनिमय प्रक्रिया में मध्यस्थ के रूप में कार्य करता है।	1

34	a)cheap labour and resources a) सस्ता श्रम और संसाधन	1
35	i)It doesn't tell us how equally or evenly income is distributed. ii)It doesn't give information regarding the human development index such as literary rate infant mortality rate etc iii)Average income doesn't give us any information regarding the non materialistic goods and services. i) यह हमें यह नहीं बताता कि आय किस प्रकार समान रूप से वितरित की जाती है। ii) यह मानव विकास सूचकांक के बारे में जानकारी नहीं देता है जैसे साहित्यिक दर, शिशु मृत्यु दर आदि iii) औसत आय हमें गैर भौतिकवादी वस्तुओं और सेवाओं के बारे में कोई जानकारी नहीं देती है।	3
36	i)All the commercial banks are required to maintain a minimum cash balance out of the deposits they receive. ii)Periodically banks have to submit information to the RBI on how much they are lending to whom and at what interest rate. iii)Bank give loans not just to profit making business and traders but also to small cultivators. iv)RBI issues currency notes. v)RBI issues currency notes of interest on deposits and lending by banks. (Any three points to be considered) i) सभी वाणिज्यिक बैंकों को प्राप्त जमा राशि में से न्यूनतम नकदी शेष बनाए रखना आवश्यक है। ii) बैंकों को समय-समय पर आरबीआई को यह जानकारी देनी होती है कि वे किसे कितना ऋण दे रहे हैं और किस ब्याज दर पर। iii) बैंक न केवल लाभ कमाने वाले व्यवसायों और व्यापारियों को बल्कि छोटे किसानों को भी ऋण देते हैं। iv)आरबीआई करेंसी नोट जारी करता है। v)आरबीआई बैंकों द्वारा जमा और उधार पर ब्याज के रूप में करेंसी नोट जारी करता है। (कोई तीन बिंदु)	3
37	i)Developed countries with the help of latest technology have surplus production and for this they require market to sell their products. ii)Developing countries provide favourable conditions for the developed countries either in the form of market or centre of production. iii)Therefore developed countries want from developing countries to liberalise their trade and investment so that the MNCs can set up factories in less expense and gain more profit. i) नवीनतम प्रौद्योगिकी की सहायता से विकसित देशों के पास अधिशेष उत्पादन है और इसके लिए उन्हें अपने उत्पादों को बेचने हेतु बाजार की आवश्यकता होती है। ii) विकासशील देश, विकसित देशों के लिए या तो बाजार के रूप में या उत्पादन के केंद्र के रूप में अनुकूल परिस्थितियां प्रदान करते हैं।	3

	iii) इसलिए विकसित देश चाहते हैं कि विकासशील देश अपने व्यापार और निवेश को उदार बनाएं ताकि बहुराष्ट्रीय कम्पनियां कम खर्च में कारखाने स्थापित कर सकें और अधिक लाभ कमा सकें।	
38A	Award 1 mark each for any five relevant points i)working hours- fixed/not fixed ii)Job security-exists/does not exist iii)paid leave-allowed/not allowed iv)medical and other allowances-provided/not guaranteed v)provident fund-paid/not paid किसी भी पाँच प्रासंगिक बिंदुओं के लिए 1 अंक प्रदान करें i)कार्य समय- निश्चित/अनिश्चित ii)नौकरी की सुरक्षा-मौजूद है/नहीं है iii) सवेतन अवकाश - अनुमत/अनुमत नहीं iv) चिकित्सा एवं अन्य भत्ते - प्रदान किए गए/गारंटी नहीं v) भविष्य निधि-भुगतान/भुगतान नहीं किया गया	5
	OR	
38B	Award 1 mark each for any five relevant points i)Basic services providing sector ii)Development of new services like information and technology. iii)Development of agriculture and industry. iv)Rise in income level. v)generation of employment किसी भी पाँच प्रासंगिक बिंदुओं के लिए 1 अंक प्रदान करें i) बुनियादी सेवा प्रदाता क्षेत्र ii) सूचना एवं प्रौद्योगिकी जैसी नई सेवाओं का विकास। iii)कृषि और उद्योग का विकास। iv)आय स्तर में वृद्धि. v)रोजगार सृजन	

Pre-board Examination(2025-26)

पूर्व- बोर्ड परीक्षा (2025-26)

Class:X | **Subject and Subject code:Social Science(087)**

कक्षा: X | विषय और विषय कोड: सामाजिक विज्ञान (087)

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

समय: 03 घंटे | अधिकतम अंक: 80

General Instructions:

सामान्य निर्देश:

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

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

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

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

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

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

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

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

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

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

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

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

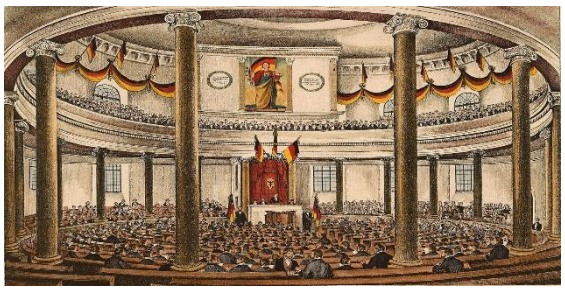
7. There are case based questions (CBQ) with three sub questions and are of 4 marks each. Answers to each question should not exceed 100 words.

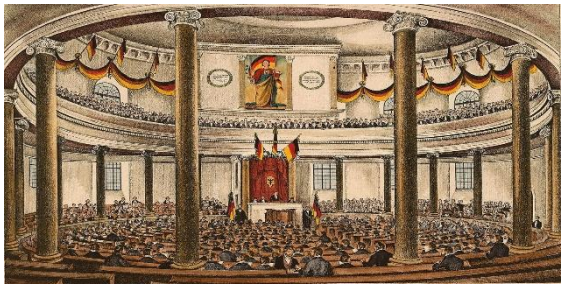
7. केस आधारित प्रश्न (CBQ) 4 अंकों के होंगे जिनमें तीन उप प्रश्न होंगे। प्रत्येक उत्तर 100 शब्दों से अधिक नहीं होना चाहिए।

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

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

9. There is no overall choice in the question paper. However, an internal choice has been provided in few questions. Only one of the choices in such questions must be attempted.
9. प्रश्न पत्र में कोई समग्र विकल्प नहीं है। हालाँकि, कुछ प्रश्नों में आंतरिक विकल्प दिया गया है। केवल एक विकल्प का प्रयास करना होगा।
10. In addition to this, NOTE that a separate question has been provided for Visually Impaired candidates in lieu of questions having visual inputs, map etc. Such questions are to be attempted by Visually Impaired candidates only.
10. दृष्टिबाधित विद्यार्थियों के लिए विशेष प्रश्न प्रदान किए गए हैं जो दृश्य इनपुट और मानचित्र आदि के स्थान पर दिए गए हैं।

	SECTION A HISTORY(20MARKS) **खंड – A :** **इतिहास (20 अंक)**	
1	Identify the painting from the options given below:-  a.Frankfurt Parliament b.Reichstag c.Duma d.The house of Parliament Note:The following question is for **Visually Impaired Candidates** only in lieu of Q.No.2 Which one of the following is not true about the female allegory of France? a.She was named Marianne b.She took part in the French Revolution. c.She was a symbol of national unity. d.Her images were marked on coins and stamps.	1

	नीचे दिए गए विकल्पों में से चित्रकला की पहचान कीजिए:  a. फ्रैंकफर्ट संसद b. राइखस्टाग c. डूमा d. संसद भवन **(दृष्टिबाधित विद्यार्थियों के लिए प्रश्न)** फ्रांस की महिला प्रतिमा (Female Allegory) के बारे में निम्नलिखित में से कौन-सा कथन असत्य है? a. उसका नाम मैरिएन था। b. उसने फ्रांसीसी क्रांति में भाग लिया। c. वह राष्ट्रीय एकता का प्रतीक थी। d. उसके चित्र सिक्कों और डाक टिकटों पर अंकित थे।	
2	Arrange the following in the sequence in which the events occurred: i)Chauri Chaura ii)Khilafat Movement iii)Second Round Table Conference iv)Civil Disobedience Movement Option: a.(i),(ii),(iii)and(iv) b.(iii),(ii),(i)and(iv) c.(ii),(i),(iv)and(iii) d.(iv),(ii),(iii)and(i) **घटनाओं को उनके घटित होने के क्रम में सजाइए:** i) चौरी-चौरा कांड ii) खिलाफत आंदोलन iii) द्वितीय गोलमेज सम्मेलन iv) सविनय अवज्ञा आंदोलन a. (i), (ii), (iii), (iv) b. (iii), (ii), (i), (iv) c. (ii), (i), (iv), (iii) d. (iv), (ii), (iii), (i)	1

3	In the 17th century the city El Dorado in South America became famous as which one the following? a.City of Diversity b.City of Gold c.Small pox City d.Trading city **17वीं शताब्दी में दक्षिण अमेरिका का एल डोराडो नगर किस नाम से प्रसिद्ध हुआ?** a. विविधता का नगर b. सोने का नगर c. चेचक का नगर d. व्यापारिक नगर	1
4	'Print culture created the conditions within which French Revolution occurred'. Which one of the following option support this statement? a.Print popularized the ideas of the enlightened thinkers. b.Provided a critical commentary on modernity and despotism. c.Print created a new culture of dialogue and debate of clergies. d.Print culture spread the views of nobility only. **"मुद्रण संस्कृति ने फ्रांसीसी क्रांति की परिस्थितियाँ निर्मित कीं"। कौन-सा विकल्प इस कथन का समर्थन करता है?** a. मुद्रण ने प्रबुद्ध विचारकों के विचारों का प्रसार किया। b. आधुनिकता और निरंकुशता पर आलोचनात्मक टिप्पणी दी। c. चर्चों में संवाद और बहस की नई संस्कृति बनाई। d. केवल कुलीन वर्ग के विचारों का प्रसार किया।	1
5A	The most powerful weapon of the Spanish conqueror was not a conventional military weapon at all. Justify the above statement by giving two reasons. **स्पेनिश विजेताओं का सबसे शक्तिशाली हथियार पारंपरिक सैन्य हथियार नहीं था। उपयुक्त कारण देकर स्पष्ट कीजिए।**	2
	OR अथवा	
5B	'Traders and travelers introduced new crops to lands they traveled'. Substantiate this statement with illustrations. **"व्यापारी और यात्री अपनी यात्राओं में नई फसलों को साथ ले गए"। उदाहरण देकर इस कथन को स्पष्ट कीजिए।**	
6A	How were the various social groups involved in the Civil Disobedience Movement? Explain with examples.	3

	असहयोग आंदोलन में विभिन्न सामाजिक समूहों की भागीदारी कैसे हुई? उदाहरण सहित समझाइए।	
	OR अथवा	
6B	How had a variety of cultural processes developed a sense of collective belongingness in India during the 19th century? Explain with examples. **19वीं शताब्दी में भारत में विभिन्न सांस्कृतिक प्रक्रियाओं ने सामूहिक एकता की भावना कैसे विकसित की? उदाहरण सहित समझाइए।**	
7A	"The first clear expression of nationalism came with the 'French Revolution' in 1789".Examine the statement. **"राष्ट्रीयता की पहली स्पष्ट अभिव्यक्ति 1789 की फ्रांसीसी क्रांति में हुई"। इस कथन की परीक्षा कीजिए।**	5
	OR अथवा	
7B	Highlights the reasons for the growth of nationalist tension in Balkan region before the First World War? **प्रथम विश्व युद्ध से पहले बाल्कन क्षेत्र में राष्ट्रवादी तनाव बढ़ने के कारणों को स्पष्ट कीजिए।**	
8	CASE BASED QUESTION Read the given text and answer the following questions:(1+1+2) India had a very rich and old tradition of handwritten manuscripts in Sanskrit, Arabic, Persian as well as in various Vernacular languages. Manuscripts were copied on palm leaves or on handmade paper. Pages were sometimes beautifully illustrated. They would be either pressed between wooden covers or sewn together to ensure preservation. Manuscripts continued to be produced till well after the introduction of print down to the late nineteenth century. 8.1 Where and hen did the printing press first come in India? 1 8.2 Who began English printing in India? 1 8.3 Why were the manuscripts not widely used in everyday life? Give any two reasons. 2 **केस आधारित प्रश्न:** भारत में संस्कृत, अरबी, फारसी तथा विभिन्न प्रादेशिक भाषाओं में पांडुलिपियाँ तैयार होती थीं। ये ताड़पत्रों या हाथ से बने कागज पर लिखी जाती थीं और लकड़ी के आवरणों में संरक्षित रहती थीं। छपाई आने के बाद भी 19वीं शताब्दी के अंत तक पांडुलिपियाँ तैयार होती रहीं। 8.1 भारत में छापाखाना सबसे पहले कब और कहाँ आया? (1) 8.2 भारत में अंग्रेजी छपाई किसने शुरू की? (1) 8.3 पांडुलिपियाँ सामान्य जीवन में क्यों प्रचलित नहीं हो सकीं? दो कारण दीजिए। (2)	4

	MAP SKILL BASED QUESTION (2MARKS) मानचित्र आधारित प्रश्न (2 अंक):	
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. A. The place where the 'Movement of Indigo planters' was started. B. The city where Indian National Congress session was held in December 1920. Note: The following questions is for **Visually Impaired Candidates** only in lieu of Q.No.9 A. The name of the place where the 'Movement of indigo Planters' was started. B. The place where Indian national Congress session was held in December 1920. **भारत के रेखांकन मानचित्र में दो स्थान A और B अंकित किए गए हैं। उनकी पहचान कीजिए और सही नाम रेखाओं पर लिखिए।** **A.** वह स्थान जहाँ 'नील किसानों का आंदोलन' प्रारंभ हुआ। **B.** वह नगर जहाँ दिसम्बर 1920 में भारतीय राष्ट्रीय कांग्रेस का अधिवेशन हुआ। **नोट:** निम्नलिखित प्रश्न केवल **दृष्टिबाधित विद्यार्थियों के लिए** प्रश्न संख्या 9 के स्थान पर है। **A.** उस स्थान का नाम लिखिए जहाँ 'नील किसानों का आंदोलन' प्रारंभ हुआ। **B.** उस नगर का नाम लिखिए जहाँ दिसम्बर 1920 में भारतीय राष्ट्रीय कांग्रेस का अधिवेशन हुआ।	2
	SECTION B GEOGRAPHY (20MARKS) **खंड – B :** **भूगोल (20 अंक)**	
10	Khushi shares information about various relief features of land. Which of the statement given by Khushi is incorrect? a.India has land under a variety of relief features namely, mountains, plateaus, plains and islands. b. About 43% of the land area is plain. c. about 27% of the area of the country is the plateau region. It possesses rich reserves of minerals, fossil fuels and forest. d. mountains account for 30% of the total surface area of the country and provides facilities for agriculture and industry.	1

	भूमि के विभिन्न स्थलरूपों के बारे में खुशी जानकारी साझा करती है। इनमें से कौन-सा कथन गलत है? a. भारत में पहाड़, पठार, मैदान और द्वीप शामिल हैं। b. 43% भूमि क्षेत्र मैदान है। c. 27% क्षेत्र पठारी है, जिसमें खनिज, जीवाश्म ईंधन और वन संसाधन हैं। d. पहाड़ कुल क्षेत्र का 30% हैं और कृषि व उद्योग को सुविधाएँ देते हैं।	
11	Which of the following is NOT an important factor in the formation of soil? a.Running water b. Chemical reactions c. Atmospheric pressure d. Change in temperature **इनमें से कौन-सा कारक मृदा निर्माण में महत्वपूर्ण नहीं है?** a. बहता हुआ पानी b. रासायनिक क्रियाएँ c. वायुमंडलीय दाब d. तापमान में परिवर्तन	1
12	Which of these is an example of people's traditional beliefs guiding them to protect the environment? a.Parts of forest area called Sacred groves are protected from interference. b. Many tribals use medicinal herbs found in forest to treat chronic. c. The Beej Bachao Andolan succeeded in showing the viability of organic farming. d. Fuel wood collection by rural people is not a valid cause of degradation of the environment. **इनमें से कौन सा लोगों की पारंपरिक मान्यताओं का एक उदाहरण है जो उन्हें पर्यावरण की रक्षा के लिए मार्गदर्शन करता है?** a. पवित्र उपवन (Sacred groves) कहे जाने वाले वन क्षेत्र के कुछ हिस्सों को हस्तक्षेप से बचाया जाता है। b. कई आदिवासी पुरानी बीमारियों के इलाज के लिए जंगल में पाई जाने वाली औषधीय जड़ी-बूटियों का उपयोग करते हैं। c. बीज बचाओ आंदोलन जैविक खेती की व्यवहार्यता दिखाने में सफल रहा। d. ग्रामीण लोगों द्वारा जलाऊ लकड़ी का संग्रह पर्यावरण के क्षरण का एक वैध कारण नहीं है।	1

13	Which of the following pairs of species is an example of a rare species and an endemic species? a.Blackbuck and Sangai deer b. Asiatic cheetah and Indian rhino c. Asiatic elephant and Gangetic dolphin d. Himalayan brown bear and Andaman teal **निम्नलिखित में से कौन सी प्रजाति जोड़ी एक दुर्लभ प्रजाति और एक स्थानिक प्रजाति का उदाहरण है?** a. काला हिरण और संगाई हिरण b. एशियाई चीता और भारतीय गैंडा c. एशियाई हाथी और गंगा की डॉल्फिन d. हिमालयी भूरा भालू और अंडमान टील	1
14	In recent years large dams have come under a great scrutiny for various reasons. Which of the following is a reason for this scrutiny? a.Dams have changed the cropping patterns which has in turn increased the gap between the rich and the poor. b. Dams act as a recreational sport as well as help in breeding of local varieties of fishes. c. Dams can't only give water for irrigation but also help in power generation. d. Dams help in conservation of water along with the flood control. **हाल के वर्षों में बड़े बांध विभिन्न कारणों से बहुत जांच के दायरे में आए हैं। निम्नलिखित में से कौन सा इस जांच का एक कारण है?** a. बांधों ने फसल पद्धति को बदल दिया है जिससे अमीर और गरीब के बीच की खाई बढ़ गई है। b. बांध मनोरंजन स्थल के रूप में काम करते हैं और साथ ही स्थानीय किस्मों की मछलियों के प्रजनन में मदद करते हैं। c. बांध न केवल सिंचाई के लिए पानी दे सकते हैं बल्कि बिजली उत्पादन में भी मदद करते हैं। d. बांध बाढ़ नियंत्रण के साथ-साथ जल संरक्षण में मदद करते हैं।	1
15	The diversion channels of western Himalayas are called: a.Canals b. Inundation channels c. Kuls d. Khadins **पश्चिमी हिमालय की वाहिकाएँ को कहा जाता है:** a. नहरें b. बाढ़ जल वाहिकाएँ c. कुल d. खादीन	1

16	Mr. 'P' is from Assam. He wishes to cultivate either tea or wheat. Which one of the crops out of the two can he cultivate in his state? Substantiate your answer with any two reasons. **श्री 'पी' असम से हैं। वह चाय या गेहूं में से किसी एक की खेती करना चाहते हैं। इन दोनों में से वह अपने राज्य में कौन सी फसल उगा सकते हैं? अपने उत्तर को किसी दो कारणों से सिद्ध कीजिए।**	2
17A	'Minerals are an indispensable part of our lives'. Support this statement with a suitable example. **'खनिज हमारे जीवन का एक अनिवार्य हिस्सा हैं'। इस कथन का उपयुक्त उदाहरण सहित समर्थन कीजिए।**	5
	OR अथवा	
17B	Analyze the impact of mining activities on the local environment and the health of the surrounding communities. **स्थानीय पर्यावरण और आसपास के समुदायों के स्वास्थ्य पर खनन गतिविधियों के प्रभाव का विश्लेषण कीजिए।**	
18	**CASE BASED QUESTION** Read the given text and answer the following questions: (1+1+2) Aluminium smelting is the second most important metallurgical industry in India. It is light, resistant to corrosion, a good conductor of heat, malleable and becomes strong when it is mixed with other metals. It is used to manufacture aircrafts, utensils and wires. It has gained popularity as a substitute of steel, copper, zinc and lead in a number of industries. Aluminium smelting plants in the country are located in Odisha, West Bengal, Kerela, Uttar Pradesh and Chattisgarh. Bauxite the raw material used in the smelters in a very bulky, dark reddish coloured rock **18.1** What do you mean by aluminium smelting? **18.2** Name the mineral used for obtaining aluminium. Write its one important characteristic by which it can be identified. **18.3** List two prime factors required for the location of an aluminium smelting plant **केस आधारित प्रश्न** **दिए गए पाठ को पढ़ें और निम्नलिखित प्रश्नों के उत्तर दें: (1+1+2)** "एल्यूमीनियम प्रगलन भारत में दूसरा सबसे महत्वपूर्ण धातुकर्म उद्योग है। यह हल्का, संक्षारण प्रतिरोधी, ऊष्मा का अच्छा सुचालक, आघातवर्धनीय है और जब इसे अन्य धातुओं के साथ मिलाया जाता है तो यह मजबूत हो जाता है। इसका उपयोग विमान, बर्तन और तार बनाने के लिए किया जाता है। इसने कई उद्योगों में स्टील, तांबा, जस्ता और सीसा के विकल्प के रूप में लोकप्रियता हासिल की है।" "देश में एल्यूमीनियम प्रगलन संयंत्र ओडिशा, पश्चिम बंगाल, केरल, उत्तर प्रदेश और	4

	छत्तीसगढ़ में स्थित हैं। बॉक्साइट, प्रगलकों में इस्तेमाल होने वाला कच्चा माल, एक बहुत भारी, गहरे लाल रंग की चट्टान है।" **18.1** एल्यूमीनियम प्रगलन से आपका क्या तात्पर्य है? **18.2** एल्यूमीनियम प्राप्त करने के लिए उपयोग किए जाने वाले खनिज का नाम बताइए। इसकी एक महत्वपूर्ण विशेषता लिखिए जिससे इसे पहचाना जा सके। **18.3** एल्यूमीनियम प्रगलन संयंत्र के स्थान के लिए आवश्यक दो प्रमुख कारकों को सूचीबद्ध कीजिए।	
	MAP SKILL BASED QUESTIONS (3 MARKS) मानचित्र कौशल आधारित प्रश्न (3 अंक)	
19	On the same outline map of India locate and label the following with suitable symbols: i)A dam built on river Mahanadi 1 OR A dam built on river Narmada ii) Any two of the following: 1x2=2 a.A seaport located in Gujarat b. An international airport in Maharashtra c. An international airport in West Bengal Note: The following question is for visually impaired candidate. Only in lieu of Q. no. 19 Answer any three of the following: a)Name the dam in the Narmada Basin. b)Name the sea port located in Gujarat. c)Name an international airport in Maharashtra. d)Name an international airport in West Bengal **भारत के उसी रूपरेखा मानचित्र पर उपयुक्त प्रतीकों के साथ निम्नलिखित को नामांकित करें:** i) महानदी नदी पर बना एक बांध 1 **अथवा** नर्मदा नदी पर बना एक बांध ii) निम्नलिखित में से कोई दो: (1x2=2) a. गुजरात में स्थित एक समुद्री बंदरगाह b. महाराष्ट्र में एक अंतर्राष्ट्रीय हवाई अड्डा c. पश्चिम बंगाल में एक अंतर्राष्ट्रीय हवाई अड्डा	3

	नोट: निम्नलिखित प्रश्न केवल दृष्टिबाधित उम्मीदवारों के लिए प्र.सं. 19 के बदले में है। निम्नलिखित में से किन्हीं तीन का उत्तर दीजिए: a.नर्मदा बेसिन में बांध का नाम बताइए। b.गुजरात में स्थित समुद्री बंदरगाह का नाम बताइए। c.महाराष्ट्र में एक अंतर्राष्ट्रीय हवाई अड्डे का नाम बताइए। d.पश्चिम बंगाल में एक अंतर्राष्ट्रीय हवाई अड्डे का नाम बताइए।	
	SECTION C POLITICAL SCIENCE (20 MARKS) **खंड C** **राजनीति विज्ञान (20 अंक)**	
20	Belgium took some measures to solve its problem. Read the following measures and choose the correct option: I.Formation of Community government. II.Following majoritarian policy. III.By providing equal representation of language groups. IV.By providing additional powers to local government. Options: a.Only I,II and III are correct. b.Only I,III,and IV are correct. c.Only I,II and IV are correct. d.Only II,III and IV are correct. **बेल्जियम ने अपनी समस्या को हल करने के लिए कुछ उपाय किए। निम्नलिखित उपायों को पढ़ें और सही विकल्प चुनें:** I. सामुदायिक सरकार का गठन। II. बहुसंख्यकवादी नीति का पालन करना। III. भाषा समूहों को समान प्रतिनिधित्व प्रदान करके। IV. स्थानीय सरकार को अतिरिक्त शक्तियाँ प्रदान करके। **विकल्प:** a. केवल I, II और III सही हैं। b. केवल I, III, और IV सही हैं। c. केवल I, II और IV सही हैं। d. केवल II, III और IV सही हैं।	1

21	Which of the following was not one of the initial demand of the Srilankan Tamils? a.Recognition of Tamil as an official language. b.Regional autonomy. c.Equality of opportunity in securing jobs and education. d.Creation of an independent Tamil Eelam(state). **निम्नलिखित में से कौन सी श्रीलंकाई तमिलों की प्रारंभिक मांगों में से एक नहीं थी?** a. तमिल को एक आधिकारिक भाषा के रूप में मान्यता। b. क्षेत्रीय स्वायत्तता। c. नौकरियों और शिक्षा प्राप्त करने में अवसर की समानता। d. एक स्वतंत्र तमिल ईलम (राज्य) का निर्माण।	1
22	Study the picture and answer the following: *The States Plead for More Powers* Which one of the following option best signifies this cartoon? a.The state representatives are begging before the Central government. b.The central government is undermining the spirit of Federalism. c.A lady is distributing food to the beggars. d.None of the above. Note: The following question is for visually impaired candidates, Only in lieu of Q. no. 22 Choose the correct pair among the following:	1

	Country	Administration
a	Russia	Unitary
b	China	Unitary
c	United Kingdom	Federal
d	Argentina	Federal

	चित्र का अध्ययन करें और निम्नलिखित का उत्तर दें: **निम्नलिखित में से कौन सा विकल्प इस कार्टून को सबसे अच्छी तरह से दर्शाता है?** a. राज्य के प्रतिनिधि केंद्र सरकार के सामने भीख मांग रहे हैं। b. केंद्र सरकार संघवाद की भावना को कमजोर कर रही है। c. एक महिला भिखारियों को भोजन बांट रही है। d. उपरोक्त में से कोई नहीं। **नोट: निम्नलिखित प्रश्न केवल दृष्टिबाधित उम्मीदवारों के लिए प्र.सं. 22 के बदले में है।** **निम्नलिखित में से सही जोड़ी चुनें:** | | **देश** | **प्रशासन** | | a. | रूस | एकात्मक | | b. | चीन | एकात्मक | | c. | यूनाइटेड किंगडम | संघीय | | d. | अर्जेंटीना | संघीय |	
23	Two statements are given as assertion(A)and reason (R). Study the statements carefully and identify the correct alternative: Assertion(A): Sometime a caste group becomes vote bank for a party. Reason(R): Selecting the candidate from same caste helps in ensuring better governance. 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.	1

	दो कथन अभिकथन (A) और कारण (R) के रूप में दिए गए हैं। कथनों का ध्यानपूर्वक अध्ययन करें और सही विकल्प की पहचान करें: **अभिकथन (A):** कभी-कभी एक जाति समूह किसी पार्टी के लिए वोट बैंक बन जाता है। **कारण (R):** एक ही जाति से उम्मीदवार का चयन बेहतर शासन सुनिश्चित करने में मदद करता है। **सही विकल्प चुनें:** a.A और R दोनों सत्य हैं, और R, A की सही व्याख्या है। b.A और R दोनों सत्य हैं, लेकिन R, A की सही व्याख्या नहीं है। c.A सत्य है लेकिन R असत्य है। d.A असत्य है लेकिन R सत्य है।	
24	Explain the advantages of decentralization. **विकेंद्रीकरण के लाभों की व्याख्या कीजिए।**	2
25	'Secularism is not an ideology of some political parties or persons but it is one of the foundations of our country.'Examine the statement. **'धर्मनिरपेक्षता कुछ राजनीतिक दलों या व्यक्तियों की विचारधारा नहीं है, बल्कि यह हमारे देश की नींव में से एक है।' कथन का परीक्षण कीजिए।**	2
26	"Democracy's ability to generate its own support is itself an outcome that cannot be ignored". Support the statement with examples. **"लोकतंत्र की अपना समर्थन स्वयं उत्पन्न करने की क्षमता अपने आप में एक ऐसा परिणाम है जिसे अनदेखा नहीं किया जा सकता है"। कथन का उदाहरण सहित समर्थन कीजिए।**	3
27A	"Political parties today face several challenges that impact their democratic functioning".Justify this statement. **"राजनीतिक दलों को आज कई चुनौतियों का सामना करना पड़ता है जो उनके लोकतांत्रिक कामकाज को प्रभावित करती हैं"। इस कथन को सही ठहराइए।**	5
	OR अथवा	
27B	"Political parties are a necessary condition for a democracy'.Analyse the statement with relevant points. **"राजनीतिक दल लोकतंत्र के लिए एक आवश्यक शर्त हैं"। प्रासंगिक बिंदुओं के साथ कथन का विश्लेषण कीजिए।**	
28	**CASE BASED QUESTION** Read the given text and answer the following questions.(1+2+1) Two different sets of reasons can be given in favour of power sharing.Let us call the first set of reasons prudential and the second moral. While prudential reasons stress that power sharing will bring out better outcomes, moral reasons emphasizes the very act of power sharing as valuable.	

	28.1Why power sharing is essential for democracy? 1 28.2 Differentiate between Community government in Belgium and Majoritarian government in Srilanka. 2 28.3 What is the moral reason for Power sharing. **केस आधारित प्रश्न** **दिए गए पाठ को पढ़ें और निम्नलिखित प्रश्नों के उत्तर दें: (1+2+1)** "सत्ता के बंटवारे के पक्ष में दो अलग-अलग तरह के कारण दिए जा सकते हैं। चलिए पहले समूह के कारणों को युक्तिपरक और दूसरे को नैतिक कहते हैं। जहाँ युक्तिपरक कारण इस बात पर जोर देते हैं कि सत्ता के बंटवारे से बेहतर परिणाम मिलेंगे, वहीं नैतिक कारण सत्ता के बंटवारे के कार्य को ही मूल्यवान मानते हैं।" 28.1 लोकतंत्र के लिए सत्ता का बंटवारा क्यों आवश्यक है? (1) 28.2 बेल्जियम में सामुदायिक सरकार और श्रीलंका में बहुसंख्यकवादी सरकार के बीच अंतर स्पष्ट कीजिए। (2) 28.3 सत्ता के बंटवारे का नैतिक कारण क्या है? (1)	
	SECTION – D ECONOMICS (20MARKS) **खंड D** **अर्थशास्त्र (20 अंक)**	
29	Before accepting job offers from distant places,people take into consideration: a.salary b.facilities for family c.disciplined working atmosphere d.all of the above **दूर के स्थानों से नौकरी के प्रस्ताव स्वीकार करने से पहले, लोग विचार करते हैं:** a. वेतन b. परिवार के लिए सुविधाएं c. अनुशासित कार्य वातावरण d. उपरोक्त सभी	1
30	GDP is the total value of _____produced during a particular year. a.all goods and services b.all final goods and services c.all intermediate goods and services	1

	d.all intermediate and final goods and services. **जीडीपी (GDP) एक विशेष वर्ष के दौरान उत्पादित _____ का कुल मूल्य है।** a. सभी वस्तुओं और सेवाओं b. सभी अंतिम वस्तुओं और सेवाओं c. सभी मध्यवर्ती वस्तुओं और सेवाओं d. सभी मध्यवर्ती और अंतिम वस्तुओं और सेवाओं।	
31	A man is employed on a food processing farm where he has to do a lot of manual work.His wife and daughter also help him in his work on the farm everyday. Which type of employment is this an example? a.Under employment b.Seasonal employment c.Over employment d.Cyclical employment **एक आदमी एक खाद्य प्रसंस्करण फार्म में कार्यरत है जहाँ उसे बहुत सारे शारीरिक काम करने पड़ते हैं। उसकी पत्नी और बेटी भी हर दिन खेत पर उसके काम में उसकी मदद करती हैं। यह किस प्रकार के रोजगार का उदाहरण है?** a. अल्प बेरोजगारी b. मौसमी बेरोजगारी c. अति-रोजगार d. चक्रीय बेरोजगारी	1
32	Mr 'X' has taken credit to make candles during the festive season. Choose the correct options that defines the importance of credit from the given options: i.It plays a vital and positive role in meeting his target and accelerating his income. ii. The credit helps him to meet the on going expenses of production. iii.The credit helps him to complete the production on time. iv.It helps him in exercising restraint and get into the habit of taking more credit. a. Only iv b. Only iii and iv c. i, ii and iii d. Only ii **श्री 'एक्स' ने त्योहारों के मौसम में मोमबत्तियां बनाने के लिए ऋण लिया है। दिए गए विकल्पों में से ऋण के महत्व को परिभाषित करने वाले सही विकल्प चुनें:**	1

	i. यह उसके लक्ष्य को पूरा करने और उसकी आय को बढ़ाने में एक महत्वपूर्ण और सकारात्मक भूमिका निभाता है। ii. ऋण उसे उत्पादन के चल रहे खर्चों को पूरा करने में मदद करता है। iii. ऋण उसे समय पर उत्पादन पूरा करने में मदद करता है। iv. यह उसे संयम बरतने और अधिक ऋण लेने की आदत डालने में मदद करता है। a. केवल iv b. केवल iii और iv c. i, ii और iii d. केवल ii	
33	Why is money called a medium of exchange? a.Because it acts as an intermediate in the exchange process. b.Because it is made of precious metal. c.Because it is a thing of everyday use. d.None of the above. **मुद्रा को विनिमय का माध्यम क्यों कहा जाता है?** a. क्योंकि यह विनिमय प्रक्रिया में एक मध्यस्थ के रूप में कार्य करती है। b. क्योंकि यह कीमती धातु से बनी है। c. क्योंकि यह रोजमर्रा के उपयोग की चीज है। d. उपरोक्त में से कोई नहीं।	1
34	The reason due to which multinational companies set up their branches in other countries is: a.cheap labour and resources b.welfare motive c.to generate employment d.to generate income **जिस कारण से बहुराष्ट्रीय कंपनियाँ दूसरे देशों में अपनी शाखाएँ स्थापित करती हैं, वह है:** a. सस्ता श्रम और संसाधन b. कल्याण का उद्देश्य c. रोजगार उत्पन्न करने के लिए d. आय उत्पन्न करने के लिए	1
35	'Average income is useful for comparison but it may hide disparities'.Support the statement with suitable arguments. **'औसत आय तुलना के लिए उपयोगी है लेकिन यह असमानताओं को छिपा सकती है'। उपयुक्त तर्कों के साथ कथन का समर्थन कीजिए।**	3

36	'The Reserve Bank Of India supervises the functioning of Formal sources of loans'. Support the statement with examples. **'भारतीय रिजर्व बैंक ऋण के औपचारिक स्रोतों के कामकाज की निगरानी करता है'। कथन का उदाहरण सहित समर्थन कीजिए।**	3
37	Why do developed countries want developing countries to liberalize their trade and investment? What do you think should the developing countries demand in return? **विकसित देश क्यों चाहते हैं कि विकासशील देश अपने व्यापार और निवेश को उदार बनाएं? आपके अनुसार विकासशील देशों को बदले में क्या मांग करनी चाहिए?**	3
38A	Saroj works in an office.Suman is her house help. State any five points of difference in the working conditions of Saroj and Suman. **सरोज एक कार्यालय में काम करती है। सुमन उसकी घरेलू सहायिका है। सरोज और सुमन की काम करने की स्थितियों में कोई पांच अंतर बताइए।**	5
	OR अथवा	
38B	Why is Tertiary Sector becoming important in India? Explain **भारत में तृतीयक क्षेत्र महत्वपूर्ण क्यों होता जा रहा है? व्याख्या कीजिए।**	