



DELHI PUBLIC SCHOOL, BHILAI

DATE : 12.12.2024

PREBOARD EXAMINATION 2024-25

Time : 3 Hrs.

CLASS : X

SUBJECT – ENGLISH COMMUNICATIVE

Max. Marks : 80

Name : _____

Roll No. : _____

General Instructions:

- The question paper contains 4 sections:

Section A: Reading (22marks)	Section B: Writing Skills (22 marks)
Section C: Grammar (10 marks)	Section D: Literature Textbook (26 marks)
- All questions are compulsory.
- Any section can be attempted at a time.
- All the questions of that particular section must be attempted in the correct order.
- Adhere to the prescribed word limit while answering the questions.

SECTION – A: READING SKILLS (22 Marks)

1. Read the passage given below carefully: (12 Marks)

1. When you are making a presentation, your posture can affect the quality of your voice. The way you stand, the position of your head, neck, feet and shoulders are important. Check that your feet are parallel and apart, and your weight is slightly forward on your feet. Make sure that your knees are relaxed. If you are tense, your back will suffer. Pay special attention to your head. Look straight out and don't push your neck out or drop on to your chest. I had a man come to see me once as he was constantly losing his voice. It was all due to his habit of sticking his neck forward which was putting pressure on his throat. He sounded quite squeaky when he spoke. What he should have been doing is keeping his ears in line with his shoulders. Your head should feel as though it is floating on top of your body!
2. Now most of us feel nervous before we speak in public. You will feel better if you spend some time dealing with this tension. It is good to try and think about what is it that is making you feel this way. That way you can have some control over it. Next, try to locate the area of tension in your body. Often it's your neck or shoulders. Then concentrate on massaging these parts and consciously trying to relax them. Believe me, it works!
3. To maximize your performance, make sure you are well prepared. Look over your notes, practice what you want to say, preferably out loud, and then, perhaps most important of all, try to feel you really want to share your subject with your audience. If you feel and share your enthusiasm with them, you're more than half-way there.
4. Remember that how people feel about you and what you are saying to them will depend on your body language. There are three main behaviour types: assertive, aggressive and passive. You can use any of these types, although I think the assertive posture is one that suits most occasions best.
5. The passive body type has a withdrawn posture. You may fidget a bit with your hands. In fact, I remember a well-known politician, who whenever addressed the gathering, would constantly massage the top of his head. So beware of those funny little mannerisms. If your posture is aggressive, however, you tend to be quite rigid. You could be constantly swinging your leg or crossing your arms and clenching your fist. The audience will feel uncomfortable. Your voice will often sound harsh or sharp and the audience may then feel quite aggressive towards you and that's something you don't want if your aim is to grab their attention to see your point of view.
6. That brings me to the assertive posture. Now you are standing straight, feeling comfortable and calm with your arms hanging loosely at your sides. In this position, there is minimal tension and your voice is full, clear and varied. You're a delight to listen to.

Answer the following questions based on the passage above.

- (a) What can happen if we are tense while making a presentation? (1)

(i) Our knees will hurt.	(ii) Our eyes get affected.
(iii) Our back will hurt.	iv) Our blood pressure will come down.
- (b) According to the passage, the audience will respond.....to speakers who are rude and sound harsh. (1)

(1) nicely	(2) aggressively	(3) badly	(4) gently
(i) Only 2	(ii) 1 and 3	(iii) Only 1	(iv) 2 and 4
- (c) Which line in Paragraph 3 can be replaced by 'you should feel close enough with audience to share your knowledge with them'? (1)

- (d) Complete the sentence appropriately. (1)
 The title 'Confident Speaker' will be inappropriate because
- (e) State whether the following statement is **TRUE** or **FALSE**. (1)
 Passive body language suits best for all occasions.
- (f) How can one overcome nervousness before speaking in public? (1)
- (g) Mention 2 important points while making a presentation. (2)
- (h) Who came to see the writer and what was his problem? (2)
- (i) How can a presenter win over the audience? (2)

2. Read the following passage carefully:

1. In the heart of bustling cities, a green revolution is taking root. Urban farming, the practice of cultivating, processing, and distributing food in urban areas, is gaining traction as a sustainable solution to the challenges of food security and environmental degradation.
2. The appeal of urban farming lies in its multifaceted benefits. For starters, it reduces the carbon footprint associated with transporting food from rural farms to urban markets. Fresh produce can be harvested and consumed within the same locality, ensuring maximum freshness and nutritional value. Moreover, urban farming utilizes innovative techniques like vertical farming and hydroponics, which use less land and water compared to traditional farming methods.
3. However, urban farming is not without its challenges. Space constraints in cities mean that urban farms are often smaller and yield less produce. Additionally, urban pollution can affect the quality of the crops. But with technological advancements and community involvement, these challenges are being addressed.
4. Governments and organizations are recognizing the potential of urban farming. Initiatives are being launched to provide training, resources, and funding to budding urban farmers. Schools are incorporating urban farming into their curriculum, teaching students the importance of sustainable agriculture and providing hands-on experience.

Survey on Urban Farming (Total number of participants: 400)

No.	Survey statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Urban farming reduces carbon footprint	245	100	40	10	5
2	Fresh produce from urban farms has higher nutritional value	220	120	40	10	10
3	Space constraints limit the yield of urban farms	210	130	40	10	10
4	Urban pollution affects the quality of crops	230	110	40	10	10
5	Vertical farming is an effective method for urban farming	235	115	40	5	5
6	Schools should teach urban farming	240	105	40	10	5

Answer the following questions based on the above survey/passage.

- (i) Urban farming is gaining popularity as a solution to _____ and _____. (1)
- (ii) One of the techniques used in urban farming that requires less land is _____. (1)
- (iii) What can be inferred about the challenges of urban farming? (1)
 (a) They are non-existent. (b) They are primarily financial.
 (c) They relate to space constraints and pollution. (d) They are due to lack of interest.
- (iv) According to the survey, which statement had the most "Strongly Agree" responses? (1)
 (a) Statement 1 (b) Statement 2 (c) Statement 3 (d) Statement 4
- (v) How can urban farming ensure maximum freshness and nutritional value? (1)
- (vi) What initiatives are taken by governments and organizations to support urban farming? (1)
- (vii) Mention the role of schools in promoting urban farming. (2)
- (viii) Elaborate on the innovative techniques used in urban farming and their benefits. (2)

SECTION – B: WRITING SKILLS (22 marks)

3. You are Anshul / Anwita of Serene Public School, Chandigarh. Your school has planned a farewell for the students of Class 10. As a Student Representative of class 10, write an e-mail to the Principal of your school, requesting him to change the farewell date, as many of the students won't be able to attend the event. Mention appropriate reason for the change of date. (3)

You may copy the given template to write your email.

From	
To	
Cc	
Date	
Subject	

4. Write a factual description, in about 100 words, of a gift you gave to your parents on their Marriage Anniversary. (4)
- 5.(A) You are Ashit/ Ashi of 125, Worli, Mumbai. You are planning to visit Wellington with your family during Christmas Vacation. Write a letter to the Manager of Vishwesh Travel Agency, in not more than 120 words, enquiring details regarding the room tariff, sight-seeing and local travel arrangements. Give the details of your arrival. Use your own ideas and can take ideas from your **MCB Unit –5 Travel and Tourism**. (7)

OR

- (B) You are Sujoy/ Sujata resident of 221, Subhadra Apartments, Bhubaneshwar. You came across an article in a newspaper and became very upset to read the thick smoke full of poisonous gases emitted by chimneys of a factory, which is mingling in the air and causing pollution. You feel strongly about it. Write a letter to the Editor of The Hindustan Times, Gandhi Marg, Bhubaneshwar, in not more than 120 words, advocating the need for a law for the punishment to the owners of the factories which emit poisonous gases. Use your own ideas and can take ideas from your **MCB Unit –4 Environment**.
- 6.(A) 'Make in India' is an initiative by Government of India. It intends to create an employment for the youth of India and helps to bring best practices to Indian business. Write an article for your school magazine in about 150 words on its impact to create an employment for the youth of India. Use the given clues along with the information you may have gathered from the **MCB Unit – 6 National Integration**. (8)

- Create employment opportunities
- To give more incentive to business
- Attract capital & technological investment
- To lure businessman
- Suggestions for improvement

OR

- (B) You are Karan/Karuna. For admission to colleges, there is a lot of competition today. For one available seat, there are hundreds of candidates. Such a situation leads to stress on the minds of students in the schools. However, the practice of Yoga can help them feel calm and stress-free. Write an article, in about 150 words, on the topic, 'Importance of Yoga for Students'. Use the given clues along with the information you may have gathered from the **MCB Unit 1 – Health and Medicine**.
- a holistic method of fitness
 - aims at all-round health and improves all systems of the body
 - pranayama helps in removing stress and tension from their minds
 - helps in reducing depression
 - Meditation skills also help students focus on important things.
 - let us make yoga a part of our life.

SECTION – C: GRAMMAR (10 marks)

7. Complete the tasks A to C, as directed.
- (A) Fill the blanks with the appropriate option from those in the brackets. (3)
- Several studies have found that people who (i) (regular/ regularize /regularly) engage in challenging activities, like reading, doing crossword puzzles or playing chess (ii) (seems/seem/seam) less likely to develop dementia (iii)..... (latter/late/later) in life.

- (B) In the following passage, one word has been omitted in each line. Write the missing word along with the word that comes before and after it. The first one has been done as an example. (4)

	Before	Missing word	After
Higher education is important part of	Eg: is	an	important
the life of every individual. Be any field of	(a)		
work, the best professionals always more	(b)		
likely to hail a rich educational background.	(c)		
Education not provides essential job skills, but it also broadens the horizons of the mind.	(d)		

- (C) Do as directed. (3)

- (i) Rearrange the following jumbled words/ phrases in the given information to create a meaningful sentence. (1)
 vast space/a multitude of/about/wandering/stars/is/in the
 A few of them form groups but the majority are solitary. They travel through a very spacious universe.

- (ii) Read the conversation and complete the passage that follows: (1+1)
 Ritika : Can I borrow your Physics book for a couple of days?
 Mohit : Yes certainly, I have already studied for the test tomorrow.
 Ritika asked Mohit (a) _____ for a couple of days. Mohit agreed and said that (b) _____.

SECTION – D : LITERATURE TEXTBOOK (26 Marks)

8. Read the extracts given below and answer the questions briefly. (ANY 2) (4+4=8)

- (A) Whose frown,
 And wrinkled lip, and sneer of cold command
 Tell that its sculptor well those passions read
 (i) Whose face lies on the sand?
 (ii) What sort of expression did the face have?
 (iii) Who understood the emotions well?
 (iv) Find the phrase in the given extract which conveys that face was arrogant, conceited, and egoist.

- (B) Alas, my lord, Your wisdom is consumed in self-confidence
 Do not go forth today: call it my fear
 That keeps you in the house, not your own.
 Let me, upon my knee, prevail in this.
 (i) Who is speaking to whom?
 (ii) What is the speaker's fear?
 (iii) What is the cause of the speaker's fear?
 (iv) Explain: "Your wisdom is consumed in self-confidence".

- (C) "This is only the first step on the ladder, my dear better half. Yes- the first step that would- God willing- mark the rise to fame and fortune of your beloved husband".
 (i) Who is the speaker?
 (ii) Whom is 'he' speaking to?
 (iii) What is referred as first step on the ladder?
 (iv) What does 'he' pray for?

9. Answer any five of the following six questions in 30-40 words each. (5x2=10)

- (i) What made the postmaster understand Ali's pain later on in the story 'The Letter'?
 (ii) Why was the grandfather so keen on changing his will? (The Dear Departed)
 (iii) What message does the poet wish to convey through his poem 'Not Marble, Nor the Gilded Monuments'?
 (iv) Do you think Mrs. Packletide was successful in her mission?
 (v) How does the story of the 'Two Gentlemen of Verona' give promise of greater hope for human society?
 (vi) How did the frog become the unrivalled king of the bog again?

10. Answer any one of the following two questions in about 150 words. (8)

In the poem 'Snake' the poet had repented that he threw a stick on the snake and drove it away. Was the ancient mariner in the poem 'The Rime of Ancient Mariner' remorseful when he killed the albatross? Compare and contrast these two characters in the light of their action.

OR

'A Shady Plot' and 'Virtually True' have certain mysterious and strange features about them. Mention these elements with reference to these characters, theme, and overall effect of the two stories.



दिल्ली पब्लिक स्कूल, भिलाई

दिनांक : 06.12.2024

कक्षा : दसवीं

नाम :

पूर्व मंडल परीक्षा (प्री-बोर्ड) 2024-25

विषय - हिन्दी 'ब' कोड संख्या : 085

निर्धारित समय : 3घण्टे

पूर्णांक : 80

रोल नंबर :

सामान्य निर्देश :

- ❖ इस प्रश्न-पत्र में चार खंड हैं – 'क', 'ख' 'ग' और 'घ'
- ❖ खंड 'क' में अपठित गद्यांश से प्रश्न पूछे गए हैं, जिनका उत्तर दिए गए निर्देशों का पालन करते हुए दीजिए।
- ❖ खंड 'ख' में व्यावहारिक व्याकरण से प्रश्न पूछे गए हैं, आंतरिक विकल्प भी दिए गए हैं।
- ❖ खंड 'ग' पाठ्यपुस्तक पर आधारित है, निर्देशानुसार उत्तर दीजिए।
- ❖ खंड 'घ' रचनात्मक लेखन पर आधारित है, आंतरिक विकल्प भी दिए गए हैं।
- ❖ प्रश्न पत्र में कुल 16 प्रश्न हैं, सभी प्रश्न अनिवार्य हैं।
- ❖ यथासंभव सभी खंडों के प्रश्नों के उत्तर क्रमशः लिखिए।

खंड – 'क' (अपठित बोध)

प्रश्न 1. निम्नलिखित गद्यांश पर आधारित प्रश्नों के उत्तर दीजिए – (7)

साक्षात्कार की सफलता बहुत कुछ इस बात पर निर्भर करती है कि आपकी अभिव्यक्ति की क्षमता कैसी है। यदि आप अपनी बात स्पष्ट रूप से प्रभावशाली तरीके से रख पा रहे हैं, तो निश्चित रूप से उसका बहुत अच्छा प्रभाव पड़ता है, इसलिए विद्यार्थियों को प्रयास करना चाहिए कि वे अपनी बोलने की शक्ति बढ़ाएँ। अच्छे शब्दों का चुनाव करें। घटिया एवं द्विअर्थी शब्दों के प्रयोग से बचना चाहिए। इसी प्रकार आपके वाक्य जटिल न होकर सरल और सुबोध हों। कठिन शब्दों एवं जटिल वाक्यों का प्रयोग आपकी भाषा को कृत्रिम बना देता है।

इसके अतिरिक्त बोर्ड के समक्ष आपका व्यवहार अत्यंत संतुलित और सौम्य होना चाहिए अर्थात् आपका बोलचाल के लहजे में सौम्यता होनी चाहिए। यदि आप सदस्य की किसी बात से सहमत नहीं हैं, तो पूरी विनम्रता के साथ उसका खंडन करें। यदि आप ऐसे अवसरों पर उग्रता अपनाते हैं, तो वह आपके असंतुलित व्यक्तित्व का परिचायक होगा। यदि आप किसी प्रश्न का उत्तर दे पाने की स्थिति में नहीं हैं, तो उसके लिए अफसोस व्यक्त करने में संकोच नहीं करना चाहिए। सदस्य इस बात को समझते हैं कि जरूरी नहीं कि आप सभी प्रश्नों के उत्तर दे सकें। गलत उत्तर देकर सदस्यों को मूर्ख बनाने का प्रयत्न कदापि न करें। इसी तरह साफ एवं स्पष्ट उत्तर न देने पर आप स्वयं फँस सकते हैं, क्योंकि ऐसी स्थिति में सदस्य आपसे उस उत्तर का स्पष्टीकरण माँगेंगे और आप अनावश्यक उलझते चले जाएँगे, इसलिए बोलना साक्षात्कार की एक आदर्श नीति मानी जाती है। जो जितना अधिक बोलेगा, उसके पकड़ में आने की आशंका उतनी ही अधिक होगी।

(क) उपर्युक्त गद्यांश किस विषय वस्तु पर आधारित है?

- | | |
|---|---|
| (i) व्यक्तित्व विकास और आत्म अभिव्यक्ति | (ii) भाषा और संप्रेषण के सिद्धांत |
| (iii) साक्षात्कार में सफलता के रहस्य | (iv) पेशेवर जीवन में नैतिकता और अनुशासन |

(ख) बोर्ड की बात पर असहमत होकर उग्रता अपनाना किस बात का परिचायक है?

- | | |
|-------------------------------------|----------------------------------|
| (i) असंतुलित व्यक्तित्व का | (ii) असंतुलित व्यवहार का |
| (iii) परिवार द्वारा दिए गए आदर्श का | (iv) समाज द्वारा सीखे गए आचरण का |

(ग) कथन (A) : साक्षात्कार की सफलता और अभिव्यक्ति की क्षमता का आपस में कोई संबंध नहीं है।

कारण (R) : ये दोनों मनुष्य जीवन के अलग-अलग पहलू हैं। (1)

कूट :

- | |
|--|
| (i) कथन (A) तथा कारण (R) दोनों सही हैं। |
| (ii) कथन (A) गलत है, किंतु कारण (R) सही है। |
| (iii) कथन (A) और कारण (R) दोनों गलत हैं। |
| (iv) कथन (A) तथा कारण (R) दोनों सही हैं तथा कारण (R), कथन (A) की सही व्याख्या करता है। |

(घ) गद्यांश के आधार पर बताइए कि साक्षात्कार की आदर्श नीति क्या है ? (2)

(ङ) अपनी बात को स्पष्ट एवं प्रभावशाली तरीके से रखने के लिए क्या करना चाहिए ? (2)

प्रश्न 2. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर निर्देशानुसार लिखिए – (7)

गीता के इस उपदेश की लोग प्रायः चर्चा करते हैं कि कर्म करें, फल की इच्छा न करें। यह कहना तो सरल है पर पालन करना उतना सरल नहीं। कर्म के मार्ग पर आनंदपूर्वक चलता हुआ उत्साही मनुष्य यदि अंतिम फल तक न भी पहुँचे तो भी उसकी दशा कर्म न करने वाले की अपेक्षा अधिकतर अवस्थाओं में अच्छी रहेगी, क्योंकि एक तो कर्म करते हुए उसका जो जीवन बीता वह संतोष या आनंद में बीता, उसके उपरांत फल की अप्राप्ति पर भी उसे यह पछतावा न रहा कि मैंने प्रयत्न नहीं किया। फल पहले से कोई बना-बनाया पदार्थ नहीं होता। अनुकूल प्रयत्न-कर्म के अनुसार, उसके एक-एक अंग की योजना होती है। किसी मनुष्य के घर का कोई प्राणी बीमार है। वह वैद्यों के यहाँ से तब तक औषधि ला-लाकर रोगी को देता जाता है, जब तक उसके चित्त में संतोष रहता है, प्रत्येक नए उपचार के साथ जो आनंद का उन्मेष होता रहता है, यह उसे कदापि प्राप्त न होता, यदि वह रोता हुआ बैठा रहता। प्रयत्न की अवस्था में उसके जीवन का जितना अंश संतोष, आशा और उत्साह में बीता, अप्रयत्न की दशा में उतना ही अंश केवल शोक और दुःख में कटता। इसके अतिरिक्त रोगी के अच्छे न होने की दशा में भी वह आत्मग्लानि के उस कठोर दुःख से बचा रहेगा, जो उसे जीवनभर यह सोच-सोचकर होता कि मैंने पूरा प्रयत्न नहीं किया।

कर्म में आनंद अनुभव करने वालों का नाम ही कर्मण्य है। धर्म और उदारता के उच्च कर्मों के विधान में ही एक ऐसा दिव्य आनंद भरा रहता है कि कर्ता को वे कर्म ही फलस्वरूप लगते हैं। अत्याचार का दमन और शमन करते हुए कर्म करने से चित्त में जो तुष्टि होती है, वही लोकोपकारी कर्मवीर का सच्चा सुख है।

(क) कर्मवीर का सुख किसे माना गया है ?

(i) अत्याचार का दमन

(ii) कर्म करते रहना

(iii) कर्म करने से प्राप्त संतोष

(iv) फल के प्रति तिरस्कार भावना

(ख) 'कर्म में आनंद का अनुभव करने वालों का नाम ही कर्मण्य है' पंक्ति के माध्यम से लेखक मनुष्य को किसके लिए प्रेरित कर रहे हैं ?

(i) कर्म करने हेतु

(ii) फल की इच्छा करने हेतु

(iii) अकर्मण्य बने रहने हेतु

(iv) प्रतीक्षा करने हेतु

(ग) कथन : कर्म न करने से मनुष्य शोक और दुःख में फँसा रहता है।

निष्कर्ष : प्रयत्न न करने वाले को मानसिक शांति और संतोष की प्राप्ति नहीं होती।

(i) कथन सही है, लेकिन निष्कर्ष गलत है।

(ii) कथन और निष्कर्ष दोनों सही हैं।

(iii) कथन गलत है, लेकिन निष्कर्ष सही है।

(iv) कथन और निष्कर्ष दोनों गलत हैं।

(घ) कर्म करने वाले को फल न मिलने पर भी पछतावा क्यों नहीं होता ?

(ङ) घर के बीमार सदस्य का उदाहरण किस संदर्भ में दिया गया है ?

खंड - 'ख' (व्यावहारिक व्याकरण)

प्रश्न 3. 'पदबंध' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिए -

(4x1=4)

(क) ततारा नामक एक युवक अत्यंत साहसी था। - वाक्य में रेखांकित पदबंध का भेद लिखिए।

(ख) विशेषण पदबंध का एक उदाहरण लिखिए।

(ग) तीसरी कसम फिल्म का निर्माण शैलेंद्र द्वारा किया गया था। - वाक्य में क्रिया पदबंध छाँटकर लिखिए।

(घ) 'सबकी सहायता करने वाले आप आज उदास क्यों हैं' - वाक्य में रेखांकित पदबंध का भेद लिखिए।

(ङ) 'परम दानी राजा रंतिदेव ने एक भूखे व्यक्ति को अपनी भोजन की थाली दे दी थी।' वाक्य में विशेषण पदबंध छाँटिए।

प्रश्न 4. 'रचना के आधार पर वाक्य-रूपांतरण' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिए -

(4x1=4)

(क) वह घर गया और काम में लग गया। (सरल वाक्य में बदलें)

(ख) मेहनत न करने के कारण वह रह गया। (वाक्य को संयुक्त वाक्य में परिवर्तित कीजिए।)

(ग) यदि पानी न बरसा, तो सूखा पड़ जाएगा। (प्रस्तुत वाक्य को सरल वाक्य में रूपांतरित कीजिए।)

(घ) माता जी द्वारा घर का प्रबंध अपने हाथ में लेने से घर में लक्ष्मी आ गई। (प्रस्तुत वाक्य को मिश्र वाक्य में रूपांतरित कीजिए।)

(ङ) संयुक्त वाक्य में समुच्चयबोधक अव्यय की भूमिका स्पष्ट कीजिए।

प्रश्न 5. 'समास' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिए -

(4x1=4)

(क) बहुव्रीहि समास की विशेषता बताते हुए एक उदाहरण दीजिए।

(ख) 'कालीमिर्च' शब्द में कौन सा समास है ?

(ग) 'पीतांबर' शब्द का समास विग्रह कर्मधारय समास के रूप में कीजिए।

(घ) 'प्रतिक्षण' पद में प्रयुक्त समास कौन सा है?

(ङ) समास में समस्त पदों को अलग-अलग करने की प्रक्रिया को क्या कहते हैं ?

प्रश्न 6. 'मुहावरे' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर लिखिए -

(4x1=4)

(क) 'नाकों चने चबाना' मुहावरे का अर्थ बताकर वाक्य में प्रयोग कीजिए।

(ख) 'तुम्हारे मित्र से तुम्हारे बारे में अनर्गल बातें सुनकर मैं तो हक्का-बक्का रह गया।' पंक्ति से मुहावरा चुनकर वाक्य में प्रयोग कीजिए।

(ग) 'निशा को घर के इतने सारे काम करते हुए गई' - सही मुहावरे का प्रयोग करते हुए रिक्त स्थान की पूर्ति कीजिए।

(घ) 'बहुत खुश होना' अर्थ के लिए उपयुक्त मुहावरा लिखिए।

(ङ) 'काम तमाम कर देना' और 'धूल में मिला देना' मुहावरे में अंतर स्पष्ट कीजिए।

खंड - 'ग' (पाठ्यपुस्तक एवं पूरक पाठ्यपुस्तक)

प्रश्न 7. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर के लिए सही विकल्प का चयन कीजिए -

(1x5=5)

ग्वालियर से मुंबई की दूरी ने संसार को काफी कुछ बदल दिया है। वसोवा में जहाँ आज मेरा घर है, पहले यहाँ दूर तक जंगल था। पेड़ थे, परिंदे थे और दूसरे जानवर थे। अब यहाँ समंदर के किनारे लंबी-चौड़ी बस्ती बन गई है। इस बस्ती ने न जाने कितने परिंदों-चरिंदों से उनका घर छीन लिया है। इनमें से कुछ शहर छोड़कर चले गए हैं। जो नहीं जा सके हैं, उन्होंने यहाँ-वहाँ डेरा डाल लिया है। इनमें से दो कबूतरों ने मेरे फ्लैट के एक मदान में घोंसला बना लिया है।

(क) ग्वालियर से मुंबई की दूरी ने संसार को कैसे बदल दिया है?

(i) बस्तियाँ बसाकर

(ii) पशु-पक्षियों को रहने की जगह देकर

(iii) प्रकृति से संतुलन बनाकर

(iv) जीवन शैली को सार्थक बनाकर

- (ख) लेखक का घर किस क्षेत्र में था ?
 (i) ग्वालियर (ii) दिल्ली (iii) जंगल (iv) मुंबई (1)
- (ग) गद्यांश के अनुसार 'डेरा डालने' से क्या अभिप्राय है ?
 (i) अस्थायी घरों का निर्माण (ii) एक जगह से दूसरी जगह जाना
 (iii) प्रकृति की दया पर चलना (iv) अस्थिर रहना (1)
- (घ) लेखक के घर पर किसने डेरा डाल लिया था ?
 (i) बिल्डरों ने (ii) कबूतरों ने (iii) चिड़ियों ने (iv) सरकारी अधिकारियों ने (1)
- (ङ) कथन (A) इस बस्ती ने न जाने कितने परिंदो-चरिंदो से उनका घर छीन लिया है
 कारण (R) कुछ परिंदे शहर छोड़कर चले गए। (1)
- (i) कथन (A) तथा कारण (R) दोनों गलत हैं।
 (ii) कथन (A) सही है, किंतु कारण (R) गलत है।
 (iii) कथन (A) और कारण (R) दोनों सही हैं तथा कारण (R), कथन (A) की सही व्याख्या करता है
 (iv) कथन (A) गलत है, किंतु कारण (R) सही है।

- प्रश्न 8. निम्नलिखित प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में दीजिए - (2x3=6)
- (क) 'तीसरी कसम' फिल्म को लेखक ने अन्य फिल्मों से भिन्न क्यों कहा है? (2)
- (ख) मनुष्य ने बुद्धि के बल पर आशातीत उन्नति की है, किंतु उन्नति के साथ-साथ वह अवनति की ओर भी बढ़ गया है कैसे? 'अब कहाँ दूसरों के दुःख से दुःखी होने वाले' पाठ के आधार पर उत्तर दीजिए। (2)
- (ग) सिपाही किससे तंग आ गए थे और क्यों? 'कारतूस' पाठ के आधार पर स्पष्ट कीजिए। (2)
- (घ) 'चाय पीने के बाद लेखक ने स्वयं में क्या परिवर्तन पाया?' 'पतझर में टूटी पत्तियाँ' पाठ के आधार पर बताइए। (2)

- प्रश्न 9. निम्नलिखित पद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर के लिए सही विकल्प का चयन कीजिए - (1x5=5)

कर चले हम फ़िदा जानो-तन साथियो
 अब तुम्हारे हवाले वतन साथियो
 साँस थमती गई, नब्ज जमती गई
 फिर भी बढ़ते कदम को न रुकने दिया
 कट गए सर हमारे तो कुछ गम नहीं
 सर हिमालय का हमने न झुकने दिया
 मरते-मरते रहा बाँकपन साथियो
 अब तुम्हारे हवाले वतन साथियो।

- (क) 'मरते-मरते रहा बाँकपन साथियो' से तात्पर्य है
 (i) अंतिम साँस तक साहस से शत्रुओं का सामना किया
 (ii) मरते-मरते मार्ग से विचलित हो गए
 (iii) शरीर में बाँकपन आ गया
 (iv) इनमें से कोई नहीं (1)
- (ख) सैनिकों ने साँसे रुकने और नब्ज जमने पर भी क्या नहीं रोका ?
 (i) गीत गाना (ii) अपने कदम आगे बढ़ाना
 (iii) दुश्मनों को खोजना (iv) युद्ध करना (1)
- (ग) युद्ध भूमि में सैनिकों का सिर कट जाने पर भी उन्हें किस बात का गर्व है ?
 (i) हिमालय पर्वत के सिर को झुकने नहीं दिया
 (ii) देश के मान-सम्मान को ठेस नहीं लगने दी
 (iii) मरते समय भी मन में बलिदान व संघर्ष का जोश बना रहा
 (iv) उपर्युक्त सभी (1)
- (घ) मरते समय सैनिकों के मन में क्या बना रहा ?
 (i) भय और आतंक का भाव
 (ii) बलिदान और संघर्ष का जोश
 (iii) राष्ट्र के गुलाम होने का विचार
 (iv) अन्य साथियों से बिछुड़ने का दुःख (1)
- (ङ) कथन (A) : सैनिक युद्ध भूमि में देश की रक्षा करते हुए अपने प्राण न्योछावर कर देते हैं
 कारण (R) : सैनिकों के लिए देश की रक्षा करना सबसे बड़ा कर्तव्य है।
- (i) कथन (A) गलत है, किंतु कारण (R) सही है।
 (ii) कथन (A) और कारण (R) दोनों गलत हैं।
 (iii) कथन (A) और कारण (R) दोनों सही हैं तथा कारण (R) कथन (A) की सही व्याख्या करता है।
 (iv) कथन (A) और कारण (R) दोनों सही हैं, किंतु कारण (R) कथन (A) की सही व्याख्या नहीं करता है। (1)

- प्रश्न 10. निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में दीजिए — (2x3=6)
- (क) 'मनुष्यता' पाठ में कवि ने किन्-किन महान दानवीर राजाओं का उल्लेख कर मनुष्यता शब्द के वास्तविक अर्थ को परिभाषित किया है ? विस्तार से लिखिए। (2)
- (ख) 'अब तो उसके ऊपर बैठकर चिड़ियाँ ही अकसर करती हैं गपशप' पंक्ति के आधार पर बताइए कि वर्तमान समय में तोप की क्या स्थिति है तथा वह हमें क्या सीख देती है ? (2)
- (ग) कवयित्री मीरा ने श्रीकृष्ण को उनकी क्षमताओं की याद क्यों दिलाई ? (2)
- (घ) ईश्वर कण-कण में व्याप्त है, परंतु हम ईश्वर को क्यों नहीं देख पाते हैं ? (2)
- (ङ) मनुष्य को अपने साहस और पुरुषार्थ पर भाग्य से अधिक भरोसा रखना चाहिए। 'आत्मत्राण' कविता के आधार पर सिद्ध कीजिए। (2)

- प्रश्न 11. निम्नलिखित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 40-50 शब्दों में दीजिए — (3x2=6)
- (क) अब तक हरिहर काका सब कुछ समझ चुके थे। इन घटनाओं का इतना गहरा नकारात्मक प्रभाव पड़ा कि वे मौन रहने लगे, वे किसी से कुछ नहीं कहते थे। हरिहर काका पर किन घटनाओं का प्रभाव पड़ा? 'हरिहर काका' कहानी के आधार पर स्पष्ट कीजिए। (3)
- (ख) टोपी दो साल लगातार फेल हो गया। पिछली कक्षा वाले बच्चों के साथ बैठना आसान काम नहीं था, उस पर अध्यापकों की बेरुखी। 'टोपी शुक्ला' कहानी के आधार पर बताइए कि एक अध्यापक द्वारा टोपी जैसे विद्यार्थियों के साथ किस प्रकार का व्यवहार करना उचित है ? (3)
- (ग) लेखक का स्कूल बहुत छोटा था, उसमें केवल नौ कमरे थे। दाईं ओर पहला कमरा हेडमास्टर श्री मदनमोहन शर्मा जी का था। वर्तमान समय में विद्यालयों की स्थिति में क्या-क्या परिवर्तन आए हैं तथा वे किस प्रकार विद्यार्थी की शिक्षा में सहायक बन रहे हैं ? स्पष्ट कीजिए। (3)

खंड - 'घ' (रचनात्मक लेखन)

- प्रश्न 12. निम्नलिखित में से किसी एक विषय पर दिए गए संकेत-बिन्दुओं के आधार पर लगभग 120 शब्दों में अनुच्छेद लिखिए — (5)

(क) बिना विचार जो करै, सो पाछे पछताए	(ख) ग्लोबल वार्मिंग (भूमण्डलीय तापक्रम) - मानवता के लिए खतरा	(ग) विज्ञापनों से भरी दुनिया
संकेत बिन्दु	संकेत बिन्दु	संकेत बिन्दु
<ul style="list-style-type: none"> ● चंचल मानव मन ● विवेकपूर्ण कम से ही सफलता ● मानव विवेकशील प्राणी 	<ul style="list-style-type: none"> ● ग्लोबल वार्मिंग क्या है ? ● ग्लोबल वार्मिंग के कारण ● ग्लोबल वार्मिंग के प्रभाव ● समस्या का समाधान 	<ul style="list-style-type: none"> ● विज्ञापन का युग ● विज्ञापन का प्रभाव ● विज्ञापन के लाभ ● विज्ञापन की हानियाँ

- प्रश्न 13. विद्यालय में सामान्य ज्ञान की मासिक पत्रिकाएँ मँगवाने के लिए प्रधानाचार्य, आदर्श विद्यालय, दिल्ली को पत्र लिखिए। (शब्द-सीमा लगभग 100 शब्द) (5)

अथवा

आपके मोहल्ले की सड़कें बहुत टूटी-फूटी व कूड़े आदि की गंदगी से भरी रहती हैं। किसी प्रमुख दैनिक समाचार-पत्र के संपादक को एक पत्र लिखकर सड़कों की मरम्मत व सफाई की ओर नगर-निगम के अधिकारियों का ध्यान आकृष्ट कीजिए। (शब्द-सीमा लगभग 100 शब्द)

- प्रश्न 14. निम्नलिखित में से किसी एक विषय पर लगभग 60 शब्दों में सूचना लिखिए — (4)
- अपना परिचय-पत्र खो जाने की जानकारी देते हुए एक सूचना तैयार कीजिए।

अथवा

पुलिस थाना, सिविल लाइंस, लुधियाना के थानाध्यक्ष की ओर से एक सूचना-पत्र लगभग 60 शब्दों में लिखिए, जिसमें नगरवासियों को शहर में निरंतर बढ़ रही वाहन चोरियों के प्रति सतर्क किया गया हो।

- प्रश्न 15. 'पेन' बनाने वाली किसी प्रसिद्ध कंपनी की ओर से लगभग 40 शब्दों में एक आकर्षक विज्ञापन तैयार कीजिए। (3)

अथवा

'नेत्रदान महादान' विषय को आधार बनाकर लगभग 40 शब्दों में विज्ञापन लिखिए।

- प्रश्न 16. आप अंकित गुप्ता/शालिनी गुप्ता हैं। बस में यात्रा करते समय आपका एटीएम कार्ड कहीं गिर गया है तथा बहुत खोजने पर भी नहीं मिल रहा है। बैंक प्रबंधक महोदय को इसकी जानकारी देते हुए नया कार्ड बनवाने के लिए लगभग 80 शब्दों में एक ई-मेल भेजिए। (5)

अथवा

'सत्य को कभी छिपाया नहीं जा सकता' इस कथन को आधार बनाकर लगभग 100 शब्दों में लघु कथा लिखिए।



दिल्ली-पब्लिक-स्कूल, भिलाईनगरम्

दिनाङ्कः - 06.12.2024
कक्षा - दशमी

पूर्वपरिषदीया परीक्षा, 2024-25
विषयः - संस्कृतम्

समयः - होरात्रयम्
पूर्णाङ्काः - 80

- (1) प्रश्नपत्रमिदं चतुर्षु भागेषु विभक्तम् अस्ति।
(2) अस्मिन् प्रश्नपत्रे अष्टादश (18) प्रश्नाः सन्ति।
(3) उत्तरपुस्तिकायाम् उत्तरलेखनात् पूर्वं प्रश्नाङ्कः अवश्यं लेखनीयः।

'क' भागः - अपठितावबोधनम् -10 अङ्काः

'ख' भागः - रचनात्मककार्यम् -15 अङ्काः

'ग' भागः - अनुप्रयुक्तव्याकरणम् - 25 अङ्काः

'घ' भागः - पठितावबोधनम् - 30 अङ्काः

'क' भागः अपठितावबोधनम्

10 अङ्काः

1. अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत -

शिक्षा मानव-विकासस्य परमं साधनम्। शिक्षा नैतिकं चारित्रिकं च विकासं सम्पादयति। शिक्षा सांस्कृतिकीं दृष्टिम् उद्बोधयति। वर्तमान-शिक्षा-पद्धतौ बालकस्य सर्वाङ्गीण-विकासस्य परिकल्पना अस्ति। अधुना बालाः आधुनिकविषयान् पठितुं संप्रेरिताः दृश्यन्ते। यथा हि विज्ञानम्, गणितम्, भूगोलम्, इतिहासम्, अर्थशास्त्रम्, राज्यानीतिशास्त्रम्, संगीतम्, संगणकयन्त्रम् आदयः। वर्तमान-शिक्षा-पद्धतौ शिक्षिताः युवकाः युवत्यश्च कठिनं श्रमं कृत्वा स्व-स्वक्षेत्रे महत्त्वपूर्णं साफल्यं प्राप्तवन्तः। अतएव शिक्षा श्रमस्य महत्त्वमपि शिक्षयति। शिक्षिताः युवकाः मानवीयगुणान् प्रति आकर्षिताः भवन्ति। अस्माकं देशे शिक्षाप्राप्त्यै कोऽपि बालः कापि बाला वा अर्थाभावं न अनुभवेत् इति भारत-सर्वकारः प्रयतेत। यतः शिक्षा न केवलं मानवकल्याणाय अपेक्षिता अपितु सा राष्ट्रगौरवाय अपि महत्त्वपूर्णा।

(i) एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)

(1x2=2)

- (क) शिक्षा कस्य महत्त्वं शिक्षयति ?
(ख) मानवविकासस्य परमं साधनं किम् ?
(ग) राष्ट्रगौरवाय का महत्त्वपूर्णा भवति ?

(ii) पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)

(2x2=4)

- (क) शिक्षा कीदृशं विकासं सम्पादयति ?
(ख) शासनं किं प्रयतेत ?
(ग) युवकाः युवत्यश्च कथं साफल्यं प्राप्तवन्तः ?

(iii) यथानिर्देशम् उत्तरत (केवलं प्रश्नत्रयम्)

(1x3=3)

- (क) 'शिक्षिताः युवकाः' अनयोः पदयोः विशेष्यपदं किम् ?
(ख) 'अस्ति' इति क्रियायाः कर्तृपदं किम् ?
(ग) 'धनाभावम्' अस्य पर्यायपदं किम् ?
(घ) 'पूरा' अस्य विलोमपदं किम् अस्ति ?

- (i) विकासस्य (ii) परिकल्पना (iii) बालकस्य
(i) अर्थाभावम् (ii) शिक्षा (iii) अनुभवेत्
(i) पूर्वम् (ii) अधुना (iii) परश्वः

(iv) अनुच्छेदस्य कृते समुचितं शीर्षकं लिखत -

(1x1=1)

'ख' भागः रचनात्मककार्यम्

15 अङ्काः

2. त्वं भीमः असि। स्वास्थ्यरक्षां प्रति जागरणार्थम् अनुजं नमनं प्रति लिखिते पत्रे मञ्जूषातः पदानि चित्वा रिक्तस्थानानि पूरयित्वा पुनः लिखत -

(½x10=5)

प्रिय नमन!

(i) _____

पूज्यायाः मातुः पत्रेण ज्ञातं यत् (ii) _____ त्वं रुग्णः आसीः। ज्ञायते यत् त्वं स्वास्थ्यरक्षां प्रति जागृतः नासि।

अनुज! स्वास्थ्यम् (iii) _____ धनम् अस्ति। तद् विना जगति सर्वधनं व्यर्थमेव। अतएव प्रातः (iv) _____ पूर्वम् स्नानं कृत्वा उत्थातव्यम्। शुद्धे (v) _____ व्यायामं कृत्वा प्रतिदिनं दुग्धं पातव्यम्। चाऊमीन वर्गरादिकं न खादितव्यम्। यतः एतत् उदराय (vi) _____ न भवति। आशा अस्ति (vii) _____ एतान् नियमान् पालयिष्यसि। यतः 'शरीरमाद्यं खलु (viii) _____' इति। गृहे (ix) _____ प्रणामाः।

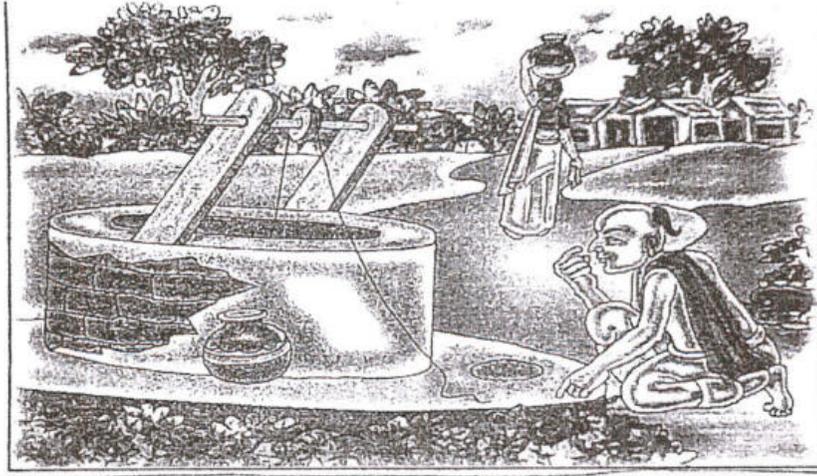
तव शुभचिन्तकः

(x) _____

मञ्जूषा -

धर्मसाधनम्	भीमः	मातापितृभ्याम्	शुभाशिषः	अमूल्यम्
गतसप्ताहे	सम्यक्	सूर्योदयात्	पवने	त्वम्

3. प्रदत्तं चित्रं दृष्ट्वा मञ्जूषायां प्रदत्तशब्दानां सहायतया पञ्चसंस्कृतवाक्यानि संस्कृतेन लिखत - (5x1=5)



मञ्जूषा -	अस्मिन्	चित्रं	कूपस्य	घटः	कुटीरद्वयम्	भवति	दृष्ट्वा
	गर्तः	कश्चित्	विप्रः	शिरसि	जलपूर्णम्	विस्मितः	महिलायाः
	शिलाखण्डे	परिश्रमः	इदं	ग्राम्य	जीवनस्य	निकटे	अस्ति

अथवा

निम्नलिखितं विषयम् अधिकृत्य मञ्जूषाप्रदत्तशब्दानां साहाय्येन पञ्चभिः संस्कृतवाक्यैः एकम् अनुच्छेदं लिखत -
'वर्षा ऋतुः'

मञ्जूषा -	सर्वे,	वृष्ट्या	जलेन	महती	वृष्टिः	मार्गाः	बालकाः	गच्छन्ति	दृश्यन्ते	अवरुद्धाः
	विद्यालयं	जलं	भीताः	अस्मिन्	सर्वत्र	सन्ति	वर्षे	एव	अभवत्	

4. अधोलिखितां कथां मञ्जूषायाः सहायतया पूरयित्वा पुनः लिखत - (½ x10=5)

एकस्मिन् (i) _____ एकः सर्पः वसति स्म। (ii) _____ भयात् कोऽपि जनः उद्यानं गन्तुं न शक्नोति स्म। एकदा एकः महात्मा तत्र आगत्य तं सर्पं (iii) _____ त्यक्तुम् अवदत्। तस्य महात्मनः प्रभावेन हिंसकप्रवृत्तिं (iv) _____ सः सर्पः शान्त-स्वभावः अभवत्। एतत् ज्ञात्वा सर्वे विस्मिताः अभवन्। बालकाः प्रस्तरेण प्रहारं कृत्वा सर्पं (v) _____ अकुर्वन्। सर्पः शान्तभावेन (vi) _____ किमपि न अकरोत्। यदा सः महात्मा (vii) _____ तत्र आगच्छत् तदा सर्पस्य ईदृशीं (viii) _____ दृष्ट्वा दुःखी अभवत्। सः सर्पात् सर्वं वृत्तान्तं ज्ञात्वा अवदत् 'हिंसा सर्वथा त्याज्या परं (ix) _____ कृते कार्ये न काचित् हानिः। एतत् श्रुत्वा भयमुक्तः सर्पः स्वकटोरम् (x) _____।

मञ्जूषा -	पुनः ,	उद्याने ,	दशाम् ,	अगच्छत् ,	स्वरक्षार्थम् ,
	सर्पस्य ,	हिंसाम् ,	परित्यज्य ,	आहतम् ,	स्थितः

अथवा

रिक्तस्थानानि पूरयित्वा अधोलिखितं संवादं पुनः लिखत -

(1x5=5)

कृष्णपालः - हे गिरिराज! अद्य त्वं कुत्र गच्छसि ?

गिरिराजः - (i) _____ ।

कृष्णपालः - तत्र किम् अस्ति ?

गिरिराजः - (ii) _____ ।

कृष्णपालः - अस्य किं महत्त्वम् अस्ति ?

गिरिराजः - अस्य (iii) _____ ।

कृष्णपालः - त्वं केन गच्छसि रेलयानेन वायुयानेन वा ?

गिरिराजः - (iv) _____ ।

कृष्णपालः - ततः मम कृते सरयूनद्याः जलम् आनय।

गिरिराजः - (v) _____ ।

मञ्जूषा -

(i)	अवश्यम् आनयामि।
(ii)	अहम् अयोध्यां गच्छामि।
(iii)	अहं वन्दे भारतेन गच्छामि।
(iv)	तत्र भगवतः श्रीरामस्य मन्दिरम् अस्ति।
(v)	महत्त्वम् अस्ति यत् श्रीरामचन्द्रः पञ्चाशत्वर्षानन्तरं स्वगृहे अस्थापयत्।

5. अधोलिखितवाक्येषु रेखाङ्कितपदेषु सन्धिं सन्धिविच्छेदं वा कुरुत – (केवलं प्रश्नचतुष्टयम्) – (4x1=4)
- (क) एतत् + अर्थं स्थलानां दर्शनाय प्रबन्धः अपि वर्तते। (ख) अहं प्रकृतिरेव युष्माकं जननी।
 (ग) प्रजहि हि + एनं ज्ञानविज्ञाननाशनम्। (घ) क्रोध एषः रजोगणसमुद्भवः।
 (ङ) प्रियच्छात्राः! प्रथमं तु अहमेव एकं प्रश्नं पृच्छामि।
6. अधोलिखितवाक्येषु रेखाङ्कितपदानां समासं विग्रहं वा प्रदत्तविकल्पेभ्यः चित्वा लिखत – (केवलं प्रश्नचतुष्टयम्) – (4x1=4)
- (i) वाकपटुः मन्त्री न परिभूयते। (क) वाकपटुः (ख) वाचि पटुः (ग) वाके पटुः (घ) वाकस्य पटुः
 (ii) भीमः पुत्रशोकविह्वलः द्रोणिं हन्तुम् अभिधावति। (क) पुत्रशोकात् विह्वलः (ख) पुत्रशोकेन विह्वलः
 (ग) पुत्राय शोक विह्वलः (घ) विह्वल पुत्रशोकः
 (iii) को भेदः पिकः च काकः च तयोः। (क) काकपिकयोः (ख) पिककाकौ (ग) पिककाकयोः (घ) काकपिकौ
 (iv) सः सकरुणम् उच्चैः अक्रन्दत्। (क) करुणा सह (ख) करुणया सह (ग) सह करुणम् (घ) सा करुणा
 (v) न पूर्वः कोशः विद्यते तव भारति! (क) नपूर्वः (ख) अपूर्वः (ग) अनपूर्वः (घ) पूर्वनः
7. अधोलिखितवाक्येषु रेखाङ्कितपदानां प्रकृति-प्रत्ययौ संयोज्य विभज्य वा उचितम् उत्तरं विकल्पेभ्यः चित्वा लिखत – (केवलं प्रश्नचतुष्टयम्) – (4x1=4)
- (i) बकः क्रूर + तल् मीनान् भक्षयति। (क) क्रूरता (ख) क्रूरतां (ग) क्रूरतया (घ) क्रूरतायाः
 (ii) अरुणाचलस्य वनसम्पदा विपुला अस्ति। (क) विपुल + आ (ख) विपुल + तल् (ग) विपुल + टाप् (घ) विपुल + ला
 (iii) इयम् इतिहास + ठक् घटना अस्ति। (क) एतिहासिकम् (ख) एतिहासिकी (ग) ऐतिहासिकम् (घ) ऐतिहासिकी
 (iv) बुद्धि + मतपु बालिकया गीता स्मृता। (क) बुद्धिमती (ख) बुद्धिमता (ग) बुद्धिमत्या (घ) बुद्धिमति
 (v) जलस्य महत्त्वं सर्वे जनाः जानन्ति। (क) मह + त्व (ख) माहत् + त्व (ग) महत् + व (घ) महत् + त्व
8. वाच्यानुसारं उचितपदैः रिक्तस्थानानि पूरयित्वा अधोलिखितं संवादं पुनः लिखत – (केवलं त्रयाणाम्) (3x1=3)
- सुरेशः – मालति! किम् अतिथयः भोजनं (i) ?
 मालती – आम् भ्रातः। (ii) भोजनं क्रियते।
 सुरेश – मालति! किं जनकेन अपि तत्र उपविश्यते ?
 मालती – भ्रातः! जनकेन तत्र (iii) ।
 सुरेशः – मालति! किं माता फलानि आनयति।
 मालती – आम्! मात्रा (iv)..... अनीयन्ते।
- मञ्जूषा —
- | | | | |
|-------|-----------|-----------|----------|
| फलानि | कुर्वन्ति | उपविश्यते | अतितिभिः |
|-------|-----------|-----------|----------|
9. कालबोधकशब्दैः अधोलिखितं विद्यालयदिनचर्या पूरयत – (केवलं प्रश्नत्रयम्) (3x1=3)
- (i) विद्यालये 7:15 वादने प्रार्थनासभा भवति। (ii) 10.00 वादने अल्पावकाशः भवति।
 (iii) 12:45 वादने क्रीडाः भवन्ति। (iv) 1:30 वादने छात्राः गृहं गच्छन्ति।
10. मञ्जूषायां प्रदत्तैः उचितैः अव्ययपदैः अधोलिखितवाक्येषु रिक्तस्थानानि पूरयत – (केवलं प्रश्नचतुष्टयम्) (4x1=4)
- (i) पतितात् कलशात् विषधरः निरगच्छत्।
 (ii) न तावत् कलहेन समयं यापयेत्।
 (iii) मेषस्य सूपकाराणां कलहम् अवेक्ष्य वानरयूथपतिः अचिन्तयत्।
 (iv) अद्य मङ्गलवासरः अस्ति बुधवासरः भविष्यति।
 (v) यदि कश्चित् गर्ते पतिष्यति स विकलाङ्गो भविष्यति।

11. अधोलिखितवाक्येषु रेखाङ्कित-अशुद्धपदाय उचितपदं चित्वा वाक्यानि पुनः लिखत – (केवलं प्रश्नत्रयम्) (3x1=3)
- (i) राज्ञः दानशीलताम् आकर्ष्य जनानि तं देशम् आयान्ति स्म। (क) जनाः (ख) जनः (ग) जने (घ) जनम्
(ii) भवान् द्रोणेः चपलां प्रकृतिं न जानासि। (क) जानामि (ख) जानाति (ग) ज्ञानसि (घ) ज्ञानाति
(iii) मदोद्धताः कपिः वानरयूथपतिम् अवदन्। (क) कपिम् (ख) कपिना (ग) कपयः (घ) कपिभ्यः
(iv) अहं ह्यः रामायणं पठिष्यामि। (क) पठसि (ख) पठाव (ग) पठामि (घ) अपठम्

‘घ’ भागः पठितावबोधनम्

30 अङ्काः

12. अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत – (5)
- अथ कदाचित् दानशालासु विचरन् स राजा बहुधनलाभेन सन्तुष्टानाम् अर्थिनां विरलसंख्यां विलोक्य अचिन्तयत् ‘मम अर्थिनः तु धनलाभमात्रेण सन्तोषं भजन्ते। नूनं ते दानवीराः सौभाग्यशालिनः यान् याचकाः शरीरस्य अङ्गानि अपि याचन्ते।’ एवं राज्ञः स्वेषु गात्रेष्वपि निरासक्तिं विज्ञाय सकलं ब्रह्माण्डं व्याकुलं सञ्जातं।
- (I) एकपदेन उत्तरत – (केवलं प्रश्नद्वयम्) (½x2=1)
(क) दानशालासु कः विचरति स्म ?
(ख) के सन्तोषं भजन्ते स्म ?
(ग) याचकाः शरीरस्य कानि याचन्ते स्म ?
- (II) पूर्णवाक्येन उत्तरत – (केवलं प्रश्नद्वयम्) (2x1=2)
(क) सकलं ब्रह्माण्डं कथं व्याकुलं सञ्जातम् ?
(ख) के सौभाग्यशालिनः सन्ति ?
(ग) राजा कथम् अचिन्तयत् ?
- (III) निर्देशानुसारम् उत्तरत – (केवलं प्रश्नद्वयम्) (2x1=2)
(क) ‘भजन्ते’ अस्य क्रियापदस्य कर्तृपदं किम् ?
(ख) ‘समस्तम्’ इत्यर्थे गद्यांशे किं पदं प्रयुक्तम् ?
(ग) ‘सन्तुष्टानाम् अर्थिनाम्’ अनयोः पदयोः विशेष्यपदं किम् ?
13. अधोलिखितं पद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत – (5)
- त्यक्त्वा धर्मप्रदां वाचं परुषां योऽभ्युदीरयेत्।
परित्यज्य फलं पक्वं भुङ्क्तेऽपक्वं विमूढधीः॥
- (I) एकपदेन उत्तरत – (केवलं प्रश्नद्वयम्) (½x2=1)
(क) कः पक्वं फलं परित्यजति ?
(ख) मूर्खः कीदृशीं वाचं त्यजति ?
(ग) मूर्खः कां वाचम् अभ्युदीरयति ?
- (II) पूर्णवाक्येन उत्तरत – (केवलं प्रश्नद्वयम्) (2x1=2)
(क) विमूढधीः कीदृशं फलं भुङ्क्ते ?
(ख) कः परुषां वाचं अभ्युदीरयति ?
(ग) विमूढधीः किं परित्यजति ?
- (III) निर्देशानुसारम् उत्तरत – (केवलं प्रश्नद्वयम्) (2x1=2)
(क) ‘पक्वम्’ इत्यस्य विशेष्यपदं किम् ?
(ख) ‘भुङ्क्ते’ इति क्रियायाः कर्तृपदं किम् ?
(ग) ‘त्यक्त्वा’ अस्य पर्यायपदं श्लोके किम् अस्ति ?
14. अधोलिखितं नाट्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत – (5)
- श्रीकृष्णः – भो धर्मराज! समीचीनं न कृतं भवता। पुत्रशोकविह्वलः भीमसेनः एकाकी एव द्रौणिं हन्तुम् अभिधावति।
युधिष्ठिरः – भगवन्! सः तु एकाकी एव द्रोणपुत्राय अलम्।
श्रीकृष्णः – न जानाति भवान् द्रोणेः चपलां प्रकृतिम्। पितुः द्रोणात् प्राप्तं ब्रह्मशिरो नाम अस्त्रं विद्यते तस्य पार्श्वे। यदि तत् प्रयुज्यते, सर्वा पृथ्वी दग्धा स्यात्।
युधिष्ठिरः – अप्येवम्! आचार्येण कीदृशः अनर्थः कृतः ? किं चपलबालकेभ्यः एतादृश-भीषणानाम् अस्त्राणां प्रदानम् उचितम् ?
श्रीकृष्णः – शृणु तावत्, आचार्येण तु प्रियशिष्याय अर्जुनाय एव प्रीत्या मनसा ब्रह्मास्त्रशिक्षा प्रदत्ता किन्तु पुत्रप्रेमपराधीनेन तेन अश्वत्थामा अपि तच्छिक्षया वञ्चितः न कृतः।
अर्जुनः – अपरं च, अस्त्रशिक्षाप्रदानात् पूर्वम् आचार्यः पुत्रं सावधानम् अकरोत्।
- (I) एकपदेन उत्तरत – (केवलं प्रश्नद्वयम्) (½x2=1)
(क) भीमसेनः कं हन्तुम् अभिधावति ?
(ख) आचार्यः द्रोणः कं सावधानम् अकरोत् ?
(ग) कस्य प्रकृतिः चपला आसीत् ?

(II) पूर्णवाक्येन उत्तरत – (केवलं प्रश्नद्वयम्) (1x2=2)

- (क) द्रोणेन अर्जुनाय कथं ब्रह्मास्त्रशिक्षा प्रदत्ता ?
 (ख) कदा सर्वा पृथ्वी दग्धा स्यात् ?
 (ग) आचार्यः पुत्रं कदा सावधानम् अकरोत् ?

(III) यथानिर्देशम् उत्तरत – (केवलं प्रश्नद्वयम्) (2x1=2)

- (क) 'प्रीत्या मनसा' अनयोः पदयोः विशेषणपदं किम् ?
 (ख) 'अभिधावति' इति क्रियायाः कर्तृपदं किम् ?
 (ग) 'समीपे' अस्य पर्यायपदं नाट्यांशे किम् अस्ति ?

15. रेखाङ्कितपदानि आधृत्य प्रश्ननिर्माणं कुरुत – (केवलं पञ्चप्रश्नाः) (5x1=5)

- (क) सहस्रांशुः न भासते। (ख) गगनात् सहस्रशः उत्काः भूमौ पतन्ति।
 (ग) भारत्याः कोशः अपूर्वः। (घ) आयुषः एकः अपि क्षणः स्वर्णकोटिकैः न लभ्यते।
 (ङ) सूर्योदये तमः नश्यति। (च) धैर्यम् आपदां तरणिः।

16. मञ्जूषातः समुचितपदानि चित्वा अधोलिखित-श्लोकस्य अन्वयं पूरयित्वा पुनः लिखत – (4x½=2)

न तथा शीतलसलिलं न चन्दनरसो न शीतला छाया।
 प्रह्लादयति च पुरुषं यथा मधुरभाषिणी वाणी॥

अन्वयः – यथा मधुरभाषिणी (i) _____ पुरुषं प्रह्लादयति (ii) _____ शीतलं सलिलं न
 (iii) _____ न शीतला (iv) _____ च न प्रह्लादयति।

मञ्जूषा –

छाया ,	तथा ,	चन्दनरसः ,	वाणी
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अथवा

मञ्जूषायाः पदानि चित्वा भावार्थं रिक्तस्थानानि पूरयत – (4x½x2=2)

विद्वांस एव लोकेऽस्मिन् चक्षुष्मन्तः प्रकीर्तिताः।
 अन्येषां वदने ये तु ते चक्षुर्नामनी मते॥

भावार्थः – विद्या एव नरस्य (i) _____ अस्ति। जनाः अनया एव संसारे सर्वविधं व्यवहारं कर्तुं समर्थाः
 भवन्ति। अतः अस्मिन् लोके केवलं (ii) _____ ज्ञानिनः विचारशीलाः एव (iii) _____
 कथिताः। अन्येषां विद्यारहितानाम् (iv) _____ तु ये चक्षुषी स्तः ते तु नाममात्रम् एव।

मञ्जूषा –

आनने ,	नेत्रम् ,	नेत्रवन्तः ,	विद्वांसः
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17. अधोलिखितवाक्येषु रेखाङ्कितपदानां प्रसङ्गानुकूलम् उचितार्थं चित्वा लिखत – (केवलं प्रश्नचतुष्टयम्) (4x1=4)

- (i) मेषस्य क्षितौ प्रलुठतः तृणेषु बहिनज्वालाः समुत्थिताः।
 (क) भूमौ (ख) रक्षितौ (ग) गृहे (घ) राजगृहे
 (ii) आपदां तरणिः धैर्यम्। (क) तरणम् (ख) धरणी (ग) नौका (घ) सूर्यः
 (iii) स विवेक इति ईरितः। (क) दुष्टः (ख) श्रुतः (ग) कथितः (घ) पठितः
 (iv) साधु पृष्टम्। (क) साधुः (ख) अनुचिताम् (ग) चित्तम् (घ) सम्यक्
 (v) काकस्य गात्रं यदि काञ्चनस्य। (क) गोत्रम् (ख) शरीरम् (ग) कुटुम्बम् (घ) नेत्रम्

18. अधोलिखितां कथां मञ्जूषापद-सहायतया पूरयित्वा लिखत – (½x8=4)

एकस्मिन् नगरे चन्द्रः नाम (i) _____ वसति स्म। तस्य पुत्राः वानरैः सह क्रीडन्ति सम। तेभ्यः भोजनं च यच्छन्ति स्म।
 तत्रैव एकं मेषयूथम् आसीत् येषु एकः मेषः महानसं (ii) _____ सर्वमेव भक्षयति। मेषस्य सूपकाराणं च मध्ये (iii) _____
 दृष्ट्वा यूथपतिः कपीन् राजगृहं त्यक्तुम् अवदत्। यूथपतिः एकाकी एव वनम् अगच्छत् यतः ते कपयः (iv) _____ त्यक्तुं
 न इच्छन्ति स्म। ततः सः मेषः अन्यस्मिन् अहनि यावत् महानसं प्रविशति तावत् सः सूपकारेण च (v) _____ काष्ठेन
 ताडितः। ऊर्णाप्रचुरः मेषः जाज्वल्यमानशरीरः दाहवेदनया भूमौ लुठति। तस्य प्रलुठतः तृणेषु बहिनज्वालाः समुत्थिताः।
 ज्वालामालाकुलाः अश्वाः अधावन् तेषु केचन (vi) _____। वैद्येन उक्तं यत् कपिमेदसा एव दाहदोषस्य (vii) _____
 भविष्यति। भयत्रस्ताः कपयः अचिन्तयन् यत् अस्माभिः (viii) _____ अवधीरिताः।

मञ्जूषा –

गुरुजनोपदेशाः	राजा ,	कलहं ,	प्रविश्य ,
नाशः ,	अर्धज्वलितेन ,	दग्धाः ,	स्वर्गसमानोपभोगान्



DATE : 09.12.2024

PREBOARD EXAMINATION 2024-'25

Time : 3 Hrs.

CLASS : X

SUBJECT – MATHEMATICS

Max. Marks : 80

Name : _____

Roll No. : _____

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

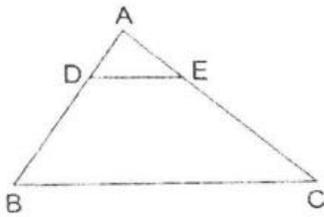
- 1. This question paper contains 38 questions. All questions are compulsory.
2. This question paper is divided into five sections – Section A, B, C, D and E.
3. In Section A, Question nos. 1 to 18 are Multiple Choice Questions (MCQs) and question numbers 19 and 20 are Assertion-Reason based questions of 1 mark each
4. In Section B, Question nos. 21 to 25 are Very Short Answer Questions carrying 2 marks each.
5. In Section C, Question nos. 26 to 31 are Short Answer (SA) type questions, carrying 3 marks each.
6. In Section D, Question nos. 32 to 35 are Long Answer (LA) type questions, carrying 5 marks each.
7. In Section E, Question nos. 36 to 38 are case study based questions, carrying 4 marks each. Internal choice is provided in 2 marks questions in each case study.
8. There is no overall choice. However, an internal choice has been provided in 2 questions in Section B, 2 questions in Section C, 2 questions in Section D and 3 questions in Section E.
9. Draw neat diagrams wherever required. Take pi = 22/7 wherever required, if not stated.
10. Use of calculator is not allowed.

Section – A

This section comprises Multiple Choice Questions of 1 mark each.

- 1. Find the value of a in the following: 6 / (3*sqrt(2) - 2*sqrt(3)) = 3*sqrt(2) - a*sqrt(3)
(A) -2 (B) 1 (C) 2 (D) -1
2. The natural number 2 is
(A) a prime number (B) a composite number
(C) prime as well as composite (D) neither prime nor composite
3. In the given figure, D is the mid-point of BC, then the value of cot y degrees / cot x degrees is :
[Diagram: A right-angled triangle ABC with the right angle at C. D is the midpoint of BC. AD is drawn. Angle CAD is x degrees and angle ABD is y degrees.]
(A) 2 (B) 1/2 (C) 1/3 (D) 1/4
4. If two tangents inclined at an angle of 60 degrees are drawn to a circle of radius 3 cm, then length of each tangent is equal to:
(A) 3/2 * sqrt(3) cm (B) 6 cm (C) 3 cm (D) 3*sqrt(3) cm
5. (sec A + tan A) (1 - sin A) is equal to :
(A) sec A (B) sin A (C) cosec A (D) cos A
6. A card is selected at random from a deck of 52 cards. The probability of it being a red face card is:
(A) 3/26 (B) 3/13 (C) 2/13 (D) 1/2
7. It is proposed to build a single circular park equal in area to the sum of areas of two circular parks of diameter 16 m and 12 m in a locality. The radius of new park would be:
(A) 24 m (B) 20 m (C) 15 m (D) 10 m
8. If cos A = 1/2, then the value of sin^2 A + cos^2 A is
(A) 2 (B) 1 (C) -1 (D) 1/2
9. If am != bl, then the system of equations
ax + by = c
lx + my = n
(A) has a unique solution (B) has no solution
(C) has infinitely many solutions (D) may or may not have solution
10. The distance of the point A(-5, 6) from the origin is
(A) 11 units (B) 61 units (C) sqrt(11) units (D) sqrt(61) units

11. If in two triangles ABC and PQR, $\frac{AB}{QR} = \frac{BC}{RP} = \frac{CA}{PQ}$, then
 (A) $\Delta PQR \sim \Delta CAB$ (B) $\Delta PQR \sim \Delta ABC$ (C) $\Delta CBA \sim \Delta PQR$ (D) $\Delta BCA \sim \Delta PQR$
12. The point which divides the line segment joining the points (8, -9) and (2,3) in the ratio 1:2 internally lies in the
 (A) I quadrant (B) II quadrant (C) III quadrant (D) IV quadrant
13. If common difference of an A.P. is 5, then what is the value of $a_{18} - a_{13}$?
 (A) 5 (B) 20 (C) 25 (D) 30
14. A pair of linear equations in two variables can be represented by two coincident lines. Then the pair of equations is
 (A) consistent (B) consistent and dependent (C) inconsistent (D) none of these
15. In ΔABC right angled at B, $\sin A = \frac{7}{25}$ then the value of $\cos C$ is:
 (A) $\frac{7}{25}$ (B) $\frac{24}{25}$ (C) $\frac{7}{24}$ (D) $\frac{24}{7}$
16. The mean and median of the same data are 24 and 26 respectively. The value of mode is:
 (A) 23 (B) 26 (C) 30 (D) 25
17. In ΔABC , D and E are points on the sides AB and AC respectively such that $DE \parallel BC$. If $AD=3$ cm, $BD=4$ cm, and $BC=14$ cm, then DE is equal to:



- (A) 7 cm (B) 6 cm (C) 4 cm (D) 3 cm
18. If $P\left(\frac{m}{3}, 4\right)$ is the mid-point of the line segment joining the points $Q(-6,5)$ and $R(-2, 3)$ then the value of m is:
 (A) -4 (B) -12 (C) 12 (D) -6

Question numbers 19 and 20 are Assertion and Reason based questions. Two statements are given, one labelled as Assertion (A) and the other is labelled as Reason (R). Select the correct answer to these questions from the codes (A), (B), (C) and (D) as given below:

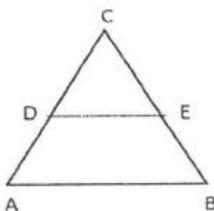
- (A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
 (B) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).
 (C) Assertion (A) is true, but Reason (R) is false.
 (D) Assertion (A) is false,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

19. **Assertion (A)** : H.C.F. (105, 225) = 15 and L.C.M. (105, 225) = $225 \times K$, then the value of K is 7.
Reason (R) : For any two positive integers a and b, $H.C.F.(a, b) \times L.C.M.(a, b) = a \times b$.
20. **Assertion (A)** : The length of the shadow of a vertical tower is $\sqrt{3}$ times the height of the tower. So the angle of elevation of the sun at this instant is 45° .
Reason (R) : The value of $\tan 45^\circ$ is 1.

Section – B

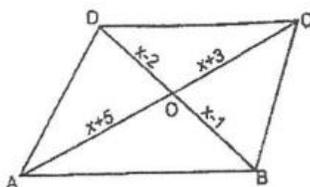
This section comprises five questions of 2 marks each.

21. In the given figure, if $\angle A = \angle B$ and $AD=BE$, show that $DE \parallel AB$ in ΔABC .



OR

In the given figure $AB \parallel DC$. Find the value of x .



22. Prove that the angle between the 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.

23. Prove that : $\frac{\sin A - 2\sin^3 A}{2\cos^3 A - \cos A} = \tan A$

OR

If $\tan(A + B) = \sqrt{3}$ and $\tan(A - B) = \frac{1}{\sqrt{3}}$, $0^\circ < A + B \leq 90^\circ$, $A > B$, find A and B.

24. Find the middle term of the A.P. 10, 7, 4,, -62.

25. A hemispherical depression is cut out from one face of a cubical wooden block such that the diameter 7 cm of the hemisphere is equal to the edge of the cube. Determine the surface area of the remaining solid.

Section – C

This section comprises six questions of 3 marks each.

26. Prove that the parallelogram circumscribing a circle is a rhombus.

27. Find a quadratic polynomial whose zeros are $5 - 3\sqrt{2}$ and $5 + 3\sqrt{2}$.

OR

If α and β are the zeros of the quadratic polynomial $5x^2 + 5x + 1$, then find the value of
 (i) $\alpha^2 + \beta^2$ (ii) $\alpha^{-1} + \beta^{-1}$

28. Prove that $\sqrt{3} - \sqrt{2}$ is an irrational number.

29. Prove that the points $A(-3, 0)$, $B(1, -3)$ and $C(4, 1)$ are the vertices of an isosceles right triangle.

OR

In what ratio is the line segment joining the points $(-2, -3)$ and $(3, 7)$ divided by the y-axis? Also find the coordinate of the point of division.

30. Solve for *and* y :

$$\frac{3x}{2} - \frac{5y}{3} = -2$$

$$\frac{x}{3} + \frac{y}{2} = \frac{13}{6}$$

31. A vessel is in the form of an inverted cone. Its height is 8 cm and the radius of its top, which is open, is 5 cm. It is filled with water upto the brim. When lead shots, each of which is a sphere of radius 0.5 cm are dropped into the vessel, one fourth of the water flows out. Find the number of lead shots dropped into the vessel.

Section – D

This section comprises four questions of 5 marks each.

32. The speed of a motor boat in still water is 20 km/hr. If for covering the distance of 15 km, the boat took 1 hour more for upstream than downstream, then find the speed of current.

33. State and prove the Basic Proportionality theorem.

OR

Sides AB and BC and median AD of a ΔABC are respectively proportional to sides PQ and QR and median PM of ΔPQR . Show that $\Delta ABC \sim \Delta PQR$.

34. The angle of elevation of a jet plane from a point P on the ground is 60° . After a flight of 15 seconds, the angle of elevation changes to 30° . If the jet plane is flying at a constant height of $1500\sqrt{3}$ m, find the speed of the plane.

OR

The angles of depression of the top and bottom of 8 m tall building from the top of a multistoreyed building are 30° and 45° respectively. Find the height of the multistoreyed building and the distance between the two buildings. [Take $\sqrt{3} = 1.73$]

35. The median of the distribution given below is 35. Find the values of x and y , if the sum of all frequencies is 170.

Class	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency	10	20	x	40	y	25	15

Section – E

This section comprises 3 case study based questions of 4 marks each.

36. Case Study – I

Blood group describes the type of blood a person has. It has a classification of blood based on the presence or absence of inherited antigenic substances on the surface of red blood cells. Blood types predict whether a serious reaction will occur in a blood transfusion.

In a sample of 50 people, 21 had type O blood, 22 had type A, 5 had type B and rest had type AB blood group.



Based on the above information, answer the following questions:

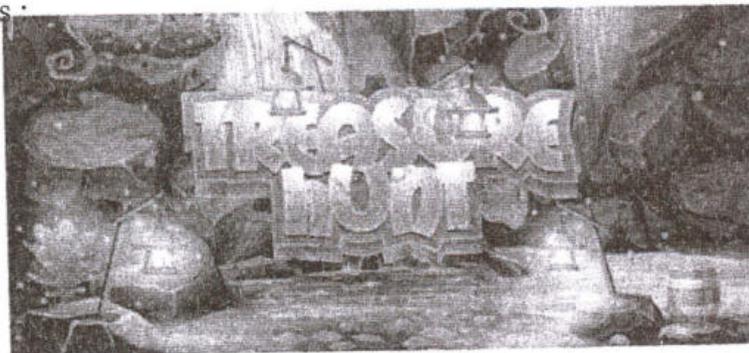
- (i) What is the probability that a person chosen at random had type O blood? (1)
- (ii) What is the probability that a person chosen at random had type AB blood group? (1)
- (iii) (a) What is the probability that a person chosen at random had neither type A nor type B blood group? (2)

OR

- (b) What is the probability that the person chosen at random had either type A or type B or type O blood group? (2)

37. Case Study – II

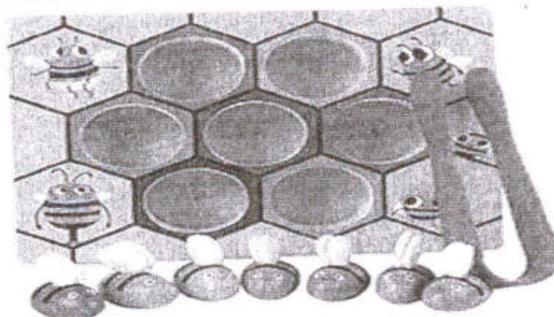
Treasure hunt is an exciting and adventurous game where participants follow a series of clues/numbers/maps to discover hidden treasures. While playing this game, some numbers are hidden in various spots collectively forming an A.P. If the number on the n^{th} spot is $20 + 4n$, then answer the following questions :



- (i) Which number is on first spot? (1)
 - (ii) (a) Which spot is numbered as 112 ? (2)
- OR**
- (b) What is the sum of all numbers on the first 10 spots? (2)
 - (iii) Which number is on the $(n - 2)^{\text{th}}$ spot? (1)

38. Case Study – III

There is a wooden toy which is like a cuboidal block of dimensions 14 cm x 17 cm x 4 cm. On its top there are seven cylindrical hollows for bees to fit in. Each cylindrical hollow is of height 3 cm and radius 2 cm.



Based on the above information, answer the following questions :

- (i) Find the volume of wood carved out to make one cylindrical hollow. (1)
- (ii) Find the lateral surface area of the cuboid to paint it with green colour. (1)
- (iii) (a) Find the volume of wood in the remaining cuboid after carving out seven cylindrical hollows. (2)

OR

- (b) Find the surface area of the top surface of the cuboid to be painted yellow. (2)



DELHI PUBLIC SCHOOL, BHILAI

DATE : 04.12.2024

PREBOARD EXAMINATION 2024-'25

Time : 3 Hrs.

CLASS : X

SUBJECT – SCIENCE

Max. Marks : 80

Name : _____

Roll No. : _____

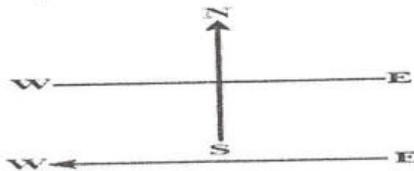
General instruction:

- (i) This question paper consists of 39 questions in 3 sections.
SECTION A – Physics, SECTION B – Chemistry & SECTION C – Biology
- (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.
- (iii) 20 objective type questions carrying 1 mark each. Students have to write correct option and answer both.
- (iv) 6 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.
- (v) 7 Short Answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.
- (vi) 3 Long Answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
- (vii) 3 source-based/case-based units of assessment of 04 marks each with sub-parts.
- (viii) **For assertion and reasoning questions options are**
 - (A) Assertion and Reason both are true, and Reason is the correct explanation of Assertion.
 - (B) Assertion and Reason both are true, but Reason is not the correct explanation of Assertion.
 - (C) Assertion is true but Reason is false.
 - (D) Assertion is false but Reason is true.

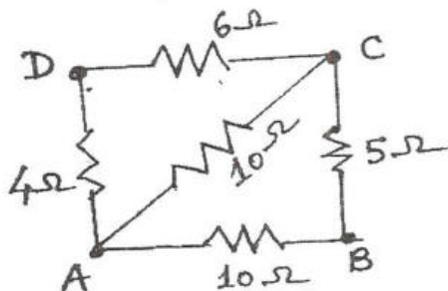
Section – A (Physics : 25 Marks)

01. The resistivity doesn't change if -
- (A) the material is changed
 - (B) the shape of resistor is changed
 - (C) the temperature is changed
 - (D) both material and temperature are changed
- (1)

02. A constant current flows in a horizontal wire in the plane of paper from east to west as shown in figure given below. The direction of magnetic field at a point will be North to South -

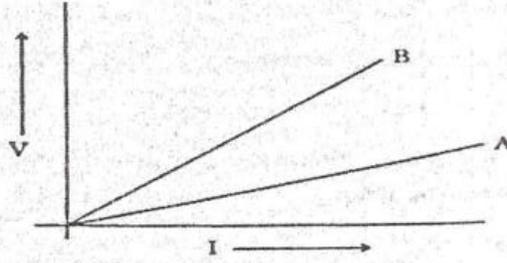


- (A) directly above the wire
 - (B) directly below the wire
 - (C) at a point located in the plane of paper, on the south side of wire.
 - (D) None of these
- (1)
03. **Assertion (A) :** When a compass needle is moved away from a current carrying straight conductor, the deflection of the needle decreases.
Reason (R) : The strength of magnetic field decreases on moving away from straight conductor. (1)
04. A network of resistances is represented in the figure given below, find equivalent resistance between A & B. (2)

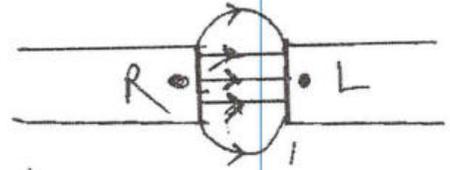


05. A person is advised to wear spectacle of power +2.5 D. Determine the focal length of the lens used. A lens of same focal length was taken in laboratory. At what distance should a student place an object from this lens so that image is formed at 10 cm from lens. (2)
06. (a) The magnification produced by a spherical mirror is -3. List any 2 informations we can obtain from this statement about the mirror / image.
- (b) An object is placed in front of a concave lens beyond 2F. Draw a ray diagram to show image formation in this case and mention about the nature and position of image. (3)

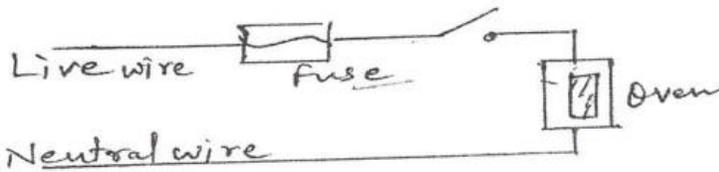
07. (a) How does use of fuse wire protect electrical appliances? Explain briefly. Also name the law on the basis of which fuse wire works.
- (b) In the given graphs for two conducting wires A and B of same diameter and same length, which of the two wires is made of higher resistivity? Justify your answer. (3)



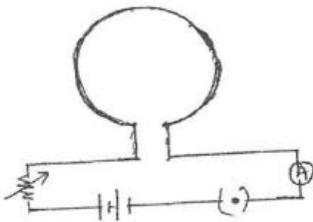
08. (a) A 10 mm long all pin is placed vertically in front of a concave mirror. A 5 mm long image of all pin is formed at 30 cm in front of the mirror. Calculate focal length of mirror and position of all pin.
- (b) Why do different colours of white light bend at different angles through prism? Explain. (3)
09. (a) Name the poles R & L of magnets in the given figure and state the inference drawn about the direction of magnetic field lines on the basis of diagram.



- (b) An electromagnet is called a temporary magnet, why?
- (c) An electric fan runs from the 220 V mains. The current flowing through it is 0.6A. At what rate is electrical energy transformed by the fan? How much energy is transformed in 2 min? (5)
- OR**
- (a) In the given circuit, will fuse protect the electric oven in case of overloading? Give reason.

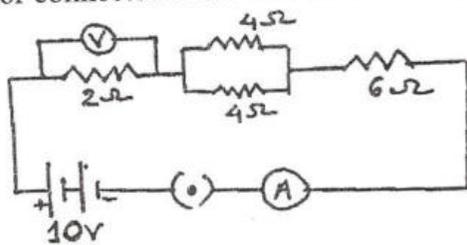


(b)



A circular coil is connected in a circuit as shown in figure. Draw the pattern of magnetic field lines linked with this coil by observing the direction of current carefully. How is reading of ammeter in the circuit related to strength of magnetic field due to circular coil? What will happen to magnetic field if in place of a big coil, a small circular coil is connected in the above circuit?

- (c) Determine the reading of ammeter in the given circuit. What will be the effect on ammeter reading of any circuit if length of resistor connected in the circuit is halved, keeping the p.d. constant?



10. **Read the given paragraph carefully and answer the questions based on it:**

Reflection of light is the phenomenon of change in path of light without any change in medium. On the other hand, refraction of light is the phenomenon of change in path of light while travelling from one medium to other medium. As different media have different optical densities, therefore speed of light in different media is different. The refractive index is the term which is used to measure the extent of refraction in any medium and is defined as ratio of speed of light in vacuum to the speed of light in medium. It is referred as absolute refractive index of medium. Both reflection and refraction of light are very useful and common phenomena in day-to-day life. Refraction of light occurring in atmosphere is responsible for events like advanced sunrise, twinkling of stars etc.

- (a) State one difference between refraction and reflection of light. (1)
- (b) Define the term used to express extent of refraction. (1)
- (c) Explain the cause of advanced sunrise in detail. (2)

OR

- (c) State laws of refraction of light.

Section – B (Chemistry : 25 Marks)

11. When copper strip is dipped in silver nitrate solution which of the following is/are correct?
 (i) Colour of silver nitrate solution turns blue.
 (ii) It is a redox reaction.
 (iii) It is double displacement reaction.
 (iv) No reaction will take place.
 (A) (i) and (ii) (B) (i), (ii) and (iii) (C) (ii), (iii) and (iv) (D) (i) and (iii) (1)
12. When steam is passed over heated iron, the products formed are magnetic oxide of iron and hydrogen gas. The coefficients of Fe and H₂O in balanced equation are respectively.
 (A) 4, 3 (B) 3, 4 (C) 2, 3 (D) 1, 1 (1)
13. Concentrated H₂SO₄ is diluted by adding drop by drop
 (A) Water to acid with constant stirring (B) Acid to water with constant stirring (1)
 (C) Water to acid followed by a base (D) Base to acid followed by cold water
14. Identify the basic salt from the following salts:
 (A) Na₂CO₃ (B) NH₄Cl (C) NaNO₃ (D) KCl (1)
15. Silver articles turn black after some time. This is due to the formation of
 (A) Ag₂O (B) Ag₂S (C) AgCl (D) AgBr (1)
16. Solder is an alloy of
 (A) Copper and tin (B) Aluminium and tin (C) Silver and tin (D) Lead and tin (1)
17. Out of C₃H₆, C₄H₁₀, C₃H₈, C₄H₈ alkanes are
 (A) C₃H₆, C₄H₈ (B) C₃H₆, C₃H₈ (C) C₃H₈, C₄H₁₀ (D) C₄H₈, C₄H₁₀ (1)
18. **Assertion (A)** : When CO₂ gas is passed through lime water for a long time, the solution first turns milky and becomes colourless.
Reason (R) : Lime water first changes into calcium carbonate which then changes into calcium bicarbonate. (1)
19. Identify the type of reaction and give one example in the form of a balanced chemical equation. (2)
- $$\text{(A)} + \text{(BC)} \longrightarrow \text{(AC)} + \text{(B)}$$
20. A compound 'X' of sodium is used as an antacid and it decomposed on strong heating.
 (a) Name the compound 'X' and give its chemical formula.
 (b) Write the balanced chemical equation to represent the decomposition of 'X'.
 (c) Give one use of the compound 'X' besides an antacid. (3)
- OR**
- A white powder is used by doctors to support fractured bones
 (a) Write the name and chemical formula of the powder.
 (b) How is this powder prepared?
 (c) When this powder is mixed with water, a hard solid mass is obtained. Write a balanced chemical equation for this change.
21. Write chemical equation for the reactions taking place when:
 (a) Zinc carbonate is calcined.
 (b) Cinnabar is heated in the air.
 (c) Manganese dioxide is heated with aluminium powder. (3)
22. The formulae of the four organic compounds are given below:
- | | | | |
|-------------------------------|----------------------|----------------------------------|-------------------------------|
| A | B | C | D |
| C ₂ H ₄ | CH ₃ COOH | C ₂ H ₅ OH | C ₂ H ₆ |
- (a) Which one of compounds A, B, C or D is a saturated hydrocarbon?
 (b) Identify the organic acid and give its structural formula.
 (c) Which one of the above compounds when heated to 443 K in the presence of concentrated H₂SO₄ forms ethene as the major product. What is the role played by concentrated H₂SO₄ in this reaction? Also write chemical equation involved.
 (d) Give a chemical equation when B and C react with each other in the presence of concentrated H₂SO₄. Name the major product formed. (5)
- OR**
- (a) Draw electron dot structure of ethyne.
 (b) Name two oxidizing agents that are used for the conversion of alcohol to acids.
 (c) Two compounds have same molecular formula C₃H₆O. Write the names of these compounds and their structural formula.
 (d) Write the name and formula of first member of cycloalkane.

23. **Read the given paragraph carefully and answer the questions based on it:**
 On the basis of their reactivity, least reactive metals occur in nature in the free state while others occur in the combined state in the form of their compounds along with impurities called minerals. Depending upon whether a metal lies low in the series or in the middle of the series or high up in the series, different methods of extraction are employed.
- (a) Name two metals which are found in free state. (1)
 (b) Name two metals which react with very dilute nitric acid to produce hydrogen gas. (1)
 (c) What is the difference between ore and a mineral? Name one chief ore of iron. (2)

OR

- (c) How the following metals are obtained from their compound by the reduction process:
 (i) Metal X which is high up in the reactivity series.
 (ii) Metal Y which is in the middle of the reactivity series.

Section – C (Biology : 30 Marks)

24. Single celled organisms release their metabolic wastes by the process of – (1)
 (A) Osmosis (B) egestion (C) diffusion (D) Absorption
25. The energy released during cellular respiration is used to synthesize a molecule called – (1)
 (A) Carbon dioxide (B) Oxygen (C) Water (D) Adenosine Triphosphate
26. The plant hormone which does not promote growth is – (1)
 (A) Abscisic Acid (B) Cytokinins (C) Gibberelleins (D) Auxins
27. Which of the following is not the part of a plant embryo – (1)
 (A) Plumule (B) Radicle (C) Cotyledon (D) Seed Coat
28. In which of the following organisms, sex is not determined genetically? (1)
 (A) Human being (B) Bees (C) Snails (D) Birds
29. What will be the amount of energy available to lion if the energy available to deer is 500 J (1)
 (A) 50 J (B) 500 J (C) 5J (D) 5000 J
30. Which of the following organisms will have maximum concentration of pesticide? (1)
 (A) peacock (B) snake (C) grass (D) frog
31. **Assertion (A) :** The forebrain is the main thinking part of the brain. (1)
Reason (R) : The forebrain controls involuntary actions like salivation, vomiting etc.
32. **Assertion (A) :** Yeasts multiply faster by the process of binary fission. (1)
Reason (R) : Binary fission is an asexual method of reproduction.
33. How do plants get rid of the following : (2)
 (a) Excess amount of water. (b) gums and resins.
- OR**
- Describe the structure and function of a nephron.
34. Which endocrine gland is located in the neck of human beings? Name the hormone secreted by this gland. (2)
35. Write **any two** methods to avoid pregnancy in human females. Which method causes irritation in uterus? (2)
36. A tall pea plant denoted by (Tt) is cross bred with another tall pea plant denoted by (Tt). In the next generation – (3)
 (a) What will be the expected plant height?
 (b) What is the percentage of dwarf pea plant?
 (c) Write the expected ratio of the genotypes TT and Tt.
37. How is the ozone formed in the upper atmosphere? Why is the damage of ozone layer a cause of concern to us? State a cause of depletion of ozone layer. (3)
38. How are water and minerals transported in plants? Explain in detail. Name the tissue which transports water. (5)
- OR**
- What is translocation? Explain how transport of food occur in plants?
39. **Read the following paragraph and answer the questions:**
 Reproduction is not necessary to maintain the life of an individual yet it is required for continuation of life of organisms. Reproducing organisms create new individuals that look very much like themselves. The organisms reproduce by either sexual or asexual methods creation of two new cells from one involves copying of DNA which is the basic step in the process or reproduction. (1)
 (a) Why does an organism reproduce? (1)
 (b) What happens to DNA before a cell divides? (2)
 (c) Write any two causes of variation in a population.
- OR**
- (c) What are the methods of reproduction? Which method of reproduction is found in
 (a) Bryophyllum (b) Spirogyra



DELHI PUBLIC SCHOOL, BHILAI

DATE : 16.12.2024

PREBOARD EXAMINATION 2024-25

Time : 3 Hrs.

CLASS : X

SUBJECT – SOCIAL SCIENCE

Max. Marks : 80

Name : _____

Roll No. : _____

General Instructions:

1. Attempt all questions.
2. Answer 1 mark questions as directed
3. Very Short Answer Type Questions carry 2 marks each. Answer to each question should not exceed 40 words.
4. Short Answer Type Questions carry 3 marks each. Answer to each question should not exceed 60 words.
5. Long answer type questions carry 5 marks each. Answer to each question should not exceed 120 words.
6. Case based questions with three sub questions carry 4 marks each. Answer to each question should not exceed 100 words.
7. Map based questions carry 5 marks with two parts, History (2 marks) and Geography (3 marks).
8. There is no overall choice in the question paper. However, an internal choice has been provided in a few questions. Only one of the choices in such questions has to be attempted.
9. In addition to these, separate instructions can be there for some questions, wherever necessary.

History & Civics : 40 Marks

Q.01 What spirit were the European governments driven by, following the defeat of Napoleon in 1815? (1)
 (A) Liberalism (B) Communism (C) Conservatism (d) Romanticism

Q.02 Identify the pair of famous historical personalities in the image/caricature below. (1)



- (A) William I and Otto Von Bismarck (B) Duke Mettermich and Friedrich Wilhelm IV
 (C) Victor Emmanuel II and Count Cavour (D) Garibaldi and Victor Emmanuel II

Q.03 Arrange the following events in the **correct chronological order**, leading to the Non Cooperation Movement. (1)

1. The Jallianwalla Bagh Massacre
 2. The starting of Mahatma Gandhi led hartal against the Rowlatt Act.
 3. The Congress session at Nagpur adopted the Non Cooperation Programme.
 4. Gandhiji wrote his famous book Hind Swaraj, stating the meaning and purpose of non cooperation.
- (A) 4, 2, 1, 3 (B) 1, 2, 3, 4 (C) 3, 2, 4, 1 (D) 2, 4, 3, 1

Q.04 Assertion (A) :The Roman Catholic Church began maintaining an Index of Prohibited Books from 1558.
 Reason (R) : Aristocratic circles and rich monastic libraries scoffed (mocked) at printed books as cheap vulgarities. (1)

- (A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).
 (B) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of the Assertion (A).
 (C) Both Assertion (A) and Reason (R) are incorrect.
 (D) Assertion (A) is correct but Reason (R) is incorrect.

Q.05 Why did the Sri Lankan Tamils launch parties and struggles? (1)

- (A) To demonstrate the power of their language.
 (B) To attack the Sinhala language.
 (C) To gain the recognition of Tamil as an official language.
 (D) To establish a dictatorial government by removing the existing majoritarian rule.

Q.06 Match List I with List II and select the **correct** answer using the codes below in the lists. (1)

	List I		List II
1.	The Act of 1956 in Sri Lanka (SL)	a.	caused a terrible setback to the social, cultural and economic life of the country.
2.	Civil War in SL	b.	is called the horizontal distribution of power.
3.	Power shared among different organs of govt.	c.	recognised Sinhala as the only official language.
4.	When power is shared between the Central government and the provincial governments	d.	we call it the vertical distribution of power.

- (A) 1-c, 2-a, 3-d, 4-b (B) 1-a, 2-c, 3-b, 4-d (C) 1-c, 2-a, 3-b, 4-d (D) 1-b, 2-a, 3-d, 4-c

- Q.07 Pick out the **incorrect** statement from among the following: (1)
(A) The Union List contains the subjects of national importance.
(B) They (subjects) are included in this list because, we need a uniform policy on them throughout the country.
(C) The Central Government alone can make laws on the subjects mentioned in this list.
(D) This list includes subjects like irrigation, education, forest, trade, commerce etc.
- Q.08 Which of the following is a scheduled language of India? (1)
(A) Mizo (B) Nagpuri (C) Maithili (D) Sambalpuri
- Q.09 What from among the following **is not** a factor for a country's economic development? (1)
(A) Country's population size (B) Form of government adopted by the country
(C) Global situation (D) Cooperation from other countries
- Q.10 Which one from among the statements below is **incorrect** about the 'legal solutions' to political problems? (1)
(A) Over regulation of the political parties can be productive. They would start reforming themselves.
(B) This would force all parties to find ways to cheat the law that imposes strict regulation.
(C) Political parties won't agree to pass a law, that they don't like.
(D) Since most of the members of a legislature, say Parliament, are from different political parties, they won't make strict laws to get themselves in trouble, in future.
- Q.11 **Pick out** the statement, that stands **against** the accommodation of social diversity by democracy. (1)
(A) In democracy, majority always needs to work with minority.
(B) It's also necessary that, rule by majority doesn't become rule by majority community.
(C) Majority and minority opinions are permanent.
(D) Rule by majority means that, in case of every decision or in case of every election, different persons and groups may and can form a majority.
- Q.12 **Statement I** : The feminist movements have helped women improve their role in public life. They are now working as scientists, doctors, engineers, lawyers, pilots and what not.
Statement II : They still face disadvantage, discrimination and oppression in various ways, in a patriarchal society like ours. (1)
(A) Statement I is correct, II is incorrect.
(B) Statement II is correct, I is not.
(C) Both I and II are incorrect.
(D) Both I and II are correct.
- Q.13 "Food offers many examples of long distance cultural exchange." Justify the statement by stating at least **two** examples from the pre-modern period of the global interconnectedness. (1+1) (2)
OR
What did the Spanish conquerors use other than the military weapon in 16th century, to conquer and colonise South America? How did they do it? (1+1)
- Q.14 "Belgium is an amazing example of power sharing arrangement in the new-age democracy." How has it done it in its central and state governments? Cite **two** features; one each in the central government and state governments. (1+1) (2)
- Q.15 "The Constitutional amendment of 1992 was a major step in decentralization, that made the third tier of democracy more powerful and effective." How? (**Any 2** points) (1+1) (2)
- Q.16 'Martin Luther was in favour of print and spoke out in praise of it.' Justify. (1+1+1) (3)
- Q.17 The idea of a what State was chosen by the framers of the Indian Constitution to combat (fight) communalism, a major challenge to our democracy? (1+1+1) (3)
- Q.18 Metternich once described Giuseppe Mazzini as 'the most dangerous enemy of our social order.' Based on what he saw in Mazzini, was he compelled to give such a remark? **Discuss.** (1+1+1+1+1) (5)
OR
"Hunger and Hardship in the first half of the 19th century Europe sowed the seeds of discontent among people against the existing governments." What caused such conditions in the continent? (1+1+1+1+1)
- Q.19 "Lack of internal democracy within political parties is a stumbling block (harmful) to the growth of democracy, all over the world." How? **Discuss.** (1+1+1+1+1) (5)
OR
Why do the representative democracies feel the necessity of the political parties today? What functions make them an inseparable part of the "people's own government". (1+1+1+1+1)

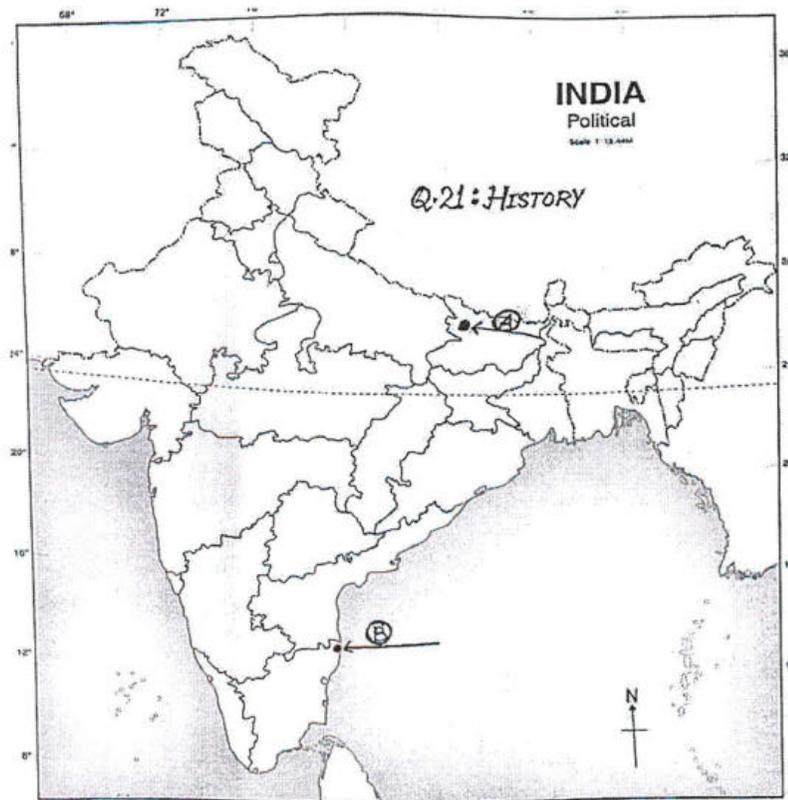
Q.20 Read the source given below and answer the questions that follow: (4)

The Independence Day Pledge, 26 January, 1930

‘We believe that, it is an inalienable right of the Indian people, as of any other people, to have freedom and to enjoy the fruits of their toil and have the necessities of life, so that they may have full opportunities of growth. We believe also that, if any government deprives a people of these rights and oppresses them, the people have a further right to alter it or to abolish it. The British government in India has not only deprived the Indian people of their freedom, but has based itself on the exploitation of the masses and has ruined India economically, politically, culturally and spiritually. We believe therefore, that India must sever the British connection and attain Purna Swaraj or Complete Independence.

- (a) Who were required to take the above pledge and why? (1)
- (b) What right do you have as the citizens today, if a government deprives you of your rights and oppresses you? (1)
- (c) (i) What did the British government do to the Indians? (1)
- (ii) What was India expected to do to the British for the illegal colonization of India? (1)

Q.21 Identify and write the names of the **two** places, marked as (A) and (B) on the given political map of India. (2)



- (A) The place where Mahatma Gandhi led peasants' struggle to get them rid of the oppressive indigo plantation system. (1)
- (B) The place where a Congress session was held in 1927. (1)

Geography : 20 Marks

- Q.22** Which one of the following soils is formed by intense leaching? (1)
(A) Red soil (b) Laterite soil (C) Alluvial Soil (D) Black soil
- Q.23** **Assertion (A)** : In the notification under Wildlife Act of 1980 and 1986, several hundred butterflies, moths, beetles and one dragonfly have been added to 'protected species'.
Reason (R) : The conservation projects are now focusing on biodiversity, rather than on a few of its components. (1)
- Q.24** Which state has the largest area under permanent forests? (1)
(A) Gujarat (B) Assam (C) Madhya Pradesh (D) Jharkhand
- Q.25** From ancient times we have been constructing sophisticated hydraulic structures in India. Give **two evidences** to prove the statement. (2)
- Q.26** Give an account of tea cultivation in India under the following heads. (3)
(i) Climate (ii) Soil (iii) Two major tea producing States
- Q.27** Why is conservation of minerals important? Explain any two steps to conserve them. (3+2)
OR (5)
What are the advantages of non-conventional sources of energy? Describe the distribution of coal in India. (3+2)

- Q.28** Read the source given below and answer the questions that follow:
 Overdrawing of ground water reserves by industry where there is a threat to ground water resources needs to be regulated legally. Particulate matter in the air can be reduced by fitting smoke stacks to factories with electrostatic precipitators, fabric filters, scrubbers and inertial separators. Smoke can be reduced by using oil or gas instead of coal in factories. Machinery and equipment can be used and generators should be fitted with silencers. Almost all machinery can be redesigned to increase energy efficiency and reduce noise. Noise pollution can also cause hearing impairment, increased heart rate and blood pressure among other physiological effects.
- (i) Why should machinery and equipment be fitted with silencers? (1)
 (ii) What are the ill effects of noise pollution on health? (1)
 (iii) What are the different ways by which particulate matter can be reduced in air? (2)
- Q.29** On the given political map of India, locate and label the following places/features. (Any three) (3)
 (i) Rana Pratap Sagar (ii) Digboi Oil Fields (iii) Jamshedpur (iv) Meenam Bakkam Airport

Economics : 20 Marks

- Q.30** What is GDP ? (1)
 (A) It is the total value of all the goods and services produced during a particular year.
 (B) It is the total value of all final goods and services produced during a particular year.
 (C) It is the total value of all intermediate goods and services produced during a particular year.
 (D) It is the total value of all intermediate and final goods and services produced during a particular year.
- Q.31** Farmers of Maharashtra decided not to sell sugarcane to a particular sugar mill. The mill will have to shut down. Which of the following sectors are affected due to the refusal of farmers to sell their sugarcane. (1)
 (A) Primary and Secondary (B) Secondary and tertiary
 (C) Primary, Secondary and tertiary (D) Primary and tertiary
- Q.32** **Assertion (A) :** Banks charge a higher interest rate on loans than what they offer on deposits.
Reason (R) : The difference between what is charged from borrower and what is paid to depositors is their main source of income. (1)
- Q.33** Evaluate the ways MNCs play a major role in the globalization process by identifying the appropriate statements among the following options : (1)
 (i) They take over some local companies in the existing country.
 (ii) Influencing the government's foreign policies of trade restrictions.
 (iii) Removing tax barriers from developing countries.
 (iv) They set up production in more than one country thus interlinking the economies.
 (A) Statement (i), (ii) and (iii) are appropriate.
 (B) All the statements are appropriate.
 (C) Statements (i) and (ii) are appropriate.
 (D) Only statement (iv) is appropriate.
- Q.34** _____ have been a major force in the globalization process connecting distant-regions of the world. (1)
 (A) Traders (B) International corporations
 (C) Multinational Corporations (D) Business houses
- Q.35** Explain how public sector contributes to the economic development of a nation. (1+1+1=3)
OR
 Describe the importance of primary sector in the Indian Economy.
- Q.36** Sunil and Raman did their graduation from the same college. Sunil got employed in an unorganized sector and was not satisfied, whereas Raman got employed in organized sector and was happy and satisfied. Identify **three** reasons for Sunil's dissatisfaction as compared to Raman. (1+1+1=3)
- Q.37** Read the source given below and answer the questions that follow: (1+1+2=4)
 Given the abundance and renewability of water, it is difficult to imagine that, we may suffer from water scarcity. The moment we speak of water shortages, we immediately associate it with regions having low rainfall or those that are drought-prone. We instantaneously visualize the deserts of Rajasthan and women balancing many matkas (earthen pots) used for collecting and storing water and travelling long distance to get water. True, the availability of water resources varies over space and time, mainly due to the variations in seasonal and annual precipitation, but water scarcity in most cases is caused by over exploitation, excessive use and unequal access to water among different social groups.
 (i) Give any one reason that contributes to water scarcity in future.
 (ii) Why would resident of Rajasthan choose to install a submersible water pump?
 (iii) Why is water conservation crucial? Discuss any one key for effective water management and conservation?
- Q.38** Define collateral securities. Explain how Reserve Bank of India supervises the functioning of Commercial Banks. (2+3=5)
OR
 Money, by providing the crucial intermediate step, eliminates the need for double coincidence of wants. Justify the statement highlighting the significance of the modern form of money in India.



DELHI PUBLIC SCHOOL, BHILAI

DATE : 19.12.2024

CLASS : X

Name : _____

PREBOARD EXAMINATION 2024-'25

SUBJECT - ARTIFICIAL INTELLIGENCE

(CODE : 417)

DAI
So.Sci
Eng
Math
Hindi
Sav Sci

Time : 2 Hrs.

Max. Marks : 50

Roll No. : _____

General Instructions:

- The question paper consists 21 questions in **two** sections – **Section A & Section B**.
- Section A** has **Objective type questions** whereas **Section B** contains **Subjective type questions**.
- All questions of a particular section must be attempted in the correct order.
- Section A** – Objective Type Questions (24 marks). This section has 5 questions. Each question has internal choice.
- Section B** – Subjective Type Questions (26 marks).
- All questions of a particular section must be attempted in the correct order.
- Do as directed.

SECTION A: OBJECTIVE TYPE QUESTIONS

- Q.1** Answer **any 4** out of the given 6 questions [on Employability Skills] (1x4=4)
- If you are aware of your own values, likes, dislikes, strengths, and shortcomings as an individual. It denotes the fact that you are _____.
(A) Self-Confident (B) Self-Control (C) Self Motivated (D) Self-Aware (1)
 - What is the shortcut key to rename a file or folder in windows?
(A) Ctrl + R (B) F2 (C) Alt + R (D) Ctrl + F2 (1)
 - Statement 1:** A realistic goal is one that has no timeline or plans for execution.
Statement 2: Breaking down big goals into smaller parts will make the goal achievable. (1)
(A) Both Statement I and Statement II are correct.
(B) Both Statement I and Statement II are incorrect.
(C) Statement I is correct but Statement II is incorrect.
(D) Statement I is incorrect but Statement II is correct
 - Here are the steps that take place when starting a computer. Rearrange the steps in the correct order.
(I) Desktop appears after login
(II) Login screen appears
(III) Power on Self-Test (POST) starts
(IV) Operating system starts
(V) Welcome screen appears
(A) (I) → (II) → (III) → (IV) → (V)
(B) (II) → (IV) → (III) → (V) → (I)
(C) (III) → (IV) → (V) → (II) → (I)
(D) (III) → (V) → (IV) → (II) → (I) (1)
 - Which of the following are the qualities of successful entrepreneurs?
(A) They are confident. (B) They take responsibility for their actions.
(C) They work hard. (D) All of the above (1)
 - _____ is a series of postures and breathing exercises practiced to achieve control of body and mind.
(A) Meditation (B) Nature Walk (C) Yoga (D) Physical Exercise (1)

- Q.2** Answer **any 5** out of the given 6 questions. (1x5=5)
- In _____, the machine is trained with huge amounts of data which helps it in training itself around the data.
(A) Supervised Learning (B) Deep Learning
(C) Classification (D) Unsupervised Learning (1)
 - Snapchat filters use _____ and _____ to enhance your selfie with flowers, cat ears etc.
(A) machine learning and deep learning
(B) data and image processing
(C) augmented reality and machine learning
(D) NLP and computer vision
 - _____ is defined as the percentage of correct predictions out of all the observations.
(A) Predictions (B) Accuracy (C) Reality (D) F1 Score (1)

- (iv) A _____ is divided into multiple layers and each layer is further divided into several blocks called nodes.
(A) Neural Networks (B) Convolutional Neural Network (CNN)
(C) Machine learning algorithm (D) Hidden Layers (1)
- (v) _____ is defined as the ability to perceive the visual world and the relationship of one object with other.
(A) Mathematical Logical Reasoning. (B) Musical Intelligence
(C) Spatial Visual Intelligence (D) Linguistic Intelligence
- (vi) Which of the following is an AI enabled?
(A) A machine that gets trained first on the training data and then optimizes itself according to its own experiences
(B) A machine which can automate our surroundings with the help of sensors.
(C) A machine which is not trained with any data.
(D) None of the above

Q.3 Answer **any 5** out of the given 6 questions. (1x5=5)

- (i) Recall-Evaluation method is
(A) defined as the fraction of positive cases that are correctly identified.
(B) defined as the percentage of true positive cases versus all the cases where the prediction is true.
(C) defined as the percentage of correct predictions out of all the observations.
(D) comparison between the prediction and reality (1)
- (ii) Give 2 examples of Supervised Learning models.
(A) Classification and Regression (B) Clustering and Dimensionality Reduction
(C) Rule Based and Learning Based (D) Classification and Clustering (1)
- (iii) In a _____ learning model, the dataset which is fed to the machine is labelled.
(A) Supervised (B) Unsupervised (C) Reinforcement (D) All of the above (1)
- (iv) Aman have a random data of 1000 dog images. He wish to understand some pattern out of it, so he would feed this data into the _____ and would train the machine on it.
(A) supervised learning model (B) unsupervised learning model
(C) reinforcement learning model (D) None of the above (1)
- (v) What will be the outcome, if the Prediction is "Yes" and it matches with the Reality? What will be the outcome, if the Prediction is "Yes" and it does not match the Reality?
(A) True Positive, True Negative (B) True Negative, False Negative
(C) True Negative, False Positive (D) True Positive, False Positive (1)
- (vi) Expand CBT _____
(A) Computer Behaved Training (B) Cognitive Behavioural Therapy
(C) Consolidated Batch of trainers (D) Combined Basic Training

Q.4 Answer **any 5** out of the given 6 questions. (1x5=5)

- (i) Define Machine Learning.
(A) Machine learning is the study of computer algorithms that improve automatically through experience.
(B) Refers to any technique that enables computers to mimic human intelligence.
(C) Machine learning refers to computer systems (both machines and software) enables machines to perform tasks for which it is programmed.
(D) Machine Learning refers to projects that allow the machine to work on a particular logic. (1)
- (ii) Differentiate between Prediction and Reality.
(A) Prediction is the input given to the machine to receive the expected result of the reality.
(B) Prediction is the output given to match the reality.
(C) The prediction is the output which is given by the machine and the reality is the real scenario in which the prediction has been made.
(D) Prediction and reality both can be used interchangeably. (1)

- (iii) The term Sentence Segmentation is
(A) the whole corpus is divided into sentences
(B) to undergo several steps to normalise the text to a lower level
(C) in which each sentence is then further divided into tokens
(D) the process in which the affixes of words are removed (1)
- (iv) _____ is a Natural Language Processing model which helps in extracting features out of the text which can be helpful in machine learning algorithms.
(A) Bag of Words (B) Big Words (C) Best Words (D) All of the above (1)
- (v) Which of the following will help to access a specific, important piece of information from a huge knowledge base.
(A) Sentiment Analysis (B) Text classification
(C) Virtual Assistants (D) Automatic Summarization (1)
- (vi) Under _____, every word, number and special character is considered separately and each of them is now a separate token.
(A) Sentence Segmentation
(B) Removing Stopwords, Special Characters and Numbers
(C) Converting text to a common case
(D) Tokenisation (1)

Q.5 Answer **any 5** out of the given 6 questions.

(1x5=5)

- (i) _____ can be defined as the measure of balance between precision and recall.
(A) F1 Score (B) Convolution constant (C) C1 Score (D) None (1)
- (ii) If model will simply remember the whole training set, and will therefore always predict the correct label for any point in the training set. This is known as _____.
(A) Overfitting (B) Overriding (C) Over remembering (D) None of the above (1)
- (iii) The result of comparison between the prediction and reality can be recorded in what we call the –
(A) Overfitting (B) Problem Scoping
(C) Confusion Matrix (D) Data acquisition (1)
- (iv) _____ is the process of understanding the reliability of any AI model, based on outputs by feeding test dataset into the model and comparing with actual answers.
(A) Evaluation (B) Problem Scoping
(C) Data acquisition (D) Data Exploration (1)
- (v) _____ is defined as the percentage of correct predictions out of all the observations.
(A) Overfitting (B) Accuracy (iii) Confusion Matrix (D) Data acquisition (1)
- (vi) _____ is the process in which the affixes of words are removed and the words are converted to their base form.
(A) Stemming (B) Stopwords (C) Case-sensitivity (D) All of the above (1)

SECTION – B (SUBJECTIVE TYPE QUESTIONS)

Answer **any 3** out of the given **5** questions on Employability Skills. Answer each question in 20 – 30 words.

- Q.6** What are the advantages of the ability to Work Independently? (2x3=6)
- Q.7** Name the Stress causing agents.
- Q.8** What do you mean by Disk Defragmentation?
- Q.9** Write four Misconceptions about entrepreneurship.
- Q.10** Sameera is always punctual at school. She has a regular schedule that she follows every day. She plans for study and play time in advance. Enlist the four steps Sameera must have followed for effective time management.

Answer **any 4** out of the given **6** questions in 20 – 30 words each.

(2x4=8)

- Q.11 Differentiate between Interests and Abilities.
- Q.12 Write few tips to protect your data from online theft and viruses
- Q.13 Explain any two SDGs in detail.
- Q.14 Differentiate between a script-bot and a smart-bot. (**Any 2 differences**)
- Q.15 What is TFIDF? Write its formula.
- Q.16 What is Accuracy? Mention its formula.

Answer **any 3** out of the given **5** questions in 50– 80 words each.

(4x3=12)

- Q.17 What is Intelligence? Explain in brief any three types of intelligence that are mainly perceived by human beings?
- Q.18 As Artificially Intelligent machines become more and more powerful, their ability to accomplish tedious tasks is becoming better. Hence, it is now that AI machines have started replacing humans in factories. While people see it in a negative way and say AI has the power to bring mass unemployment and one day, machines would enslave humans, on the other hand, other people say that machines are meant to ease our lives. If machines over take monotonous and tedious tasks, humans should upgrade their skills to remain their masters always.

What according to you is a better approach towards this ethical concern? Justify your answer.

- Q.19 Draw the 4Ws problem canvas and explain each one of them briefly.
- Q.20 What are the steps of text Normalization? Explain them in brief.
- Q.21 Calculate Accuracy, Precision, Recall and F1 Score for the following Confusion Matrix on Heart Attack Risk. Also suggest which metric would not be a good evaluation parameter here and why?

The Confusion Matrix	Reality: 1	Reality: 0
Prediction: 1	50	20
Prediction: 0	10	20

The Confusion Matrix	Reality: 1	Reality: 0		
Prediction: 1	50	20		70
Prediction: 0	10	20		30
	60	40		100