



DELHI PUBLIC SCHOOL, BHILAI

Date : 07.12.2022

PREBOARD EXAMINATION-2022-'23

Time : 3 Hrs.

Class : X

SUBJECT : ENGLISH LANGUAGE AND LITERATURE

Max. Marks : 80

General Instructions:

1. The question paper contains THREE sections - READING, GRAMMAR & WRITING and LITERATURE.
2. Attempt questions based on specific instructions for each part.

SECTION - A - READING SKILLS

20 Marks

I. Read the passage given below.

1. The seasonal problem of water taps running dry is plaguing most of our major cities. With the bigger rivers flowing in trickles and ponds and wells reduce to clay pits, village women in remote areas have to fetch every drop of water for drinking, cooking, washing and so on, across large distances. This has only worsened a perennial problem, that of widespread pollution of water, rendering it unfit for human consumption. The monsoons and the attendant floods will not solve this problem.
2. The Delhi administration is seriously worried about the threat to civic health posed by the polluted waters of the Yamuna. Two main tanks are to be set up to treat sewage. At present, only 60% of the 200 million gallons of the city's sewage receives any kind of treatment before it is dumped into the river which supplies water not only to this city but to innumerable towns and villages downstream. The Ganga, the Yamuna, the Kaveri, in fact all our important rivers serving many urban conglomerations, are fast becoming a major source of diseases.
3. A comprehensive bill introduced in the Parliament recently, envisages the setting up of central and state boards for the prevention and control of water pollution. But it will obviously take some time before legislation is passed and effectively implemented. Meanwhile the problem continues to swell. According to a survey of eight dwelling countries conducted a couple of years ago, 90% of all child deaths were due to water borne diseases. It is the same unchanged story today.
4. In a country like India, a burgeoning population continuing to use the open countryside as a lavatory means that with every dust storm and rain, human excreta laden with germs and parasites find their way to ponds, shallow wells and even the streams and rivers. Only 18% of the rural folk have access to potable water.
5. A new threat that has already assumed alarming proportions is from industrial waste which is generally dumped untreated into the nearest river. For instance, for every kilogram of process hide, 30 to 40 litres of foul smelling waste water has to be disposed off. There are at least 900 licensed tanneries in the organised sector. Putrefied paper and jute waste, metallic waste from straw board and textile mills, sulphur, ammonia, urea, metallic salts and corrosive acids all find their way to the rivers of India.
6. It is important not only to make new laws to ensure the purity of water but also to realise the urgency of implementing them ruthlessly, if we are to avoid a national health disaster cutting across the barrier between towns and countryside.

Based on your understanding of the passage answer the questions given below.

1x10=10

I. According to the passage, what is envisaged in a comprehensive bill introduced in the Parliament recently?

II. The most appropriate title for the passage is :

- (i) The Inevitable Evil of Pollution (ii) Water Scarcity
(iii) Pollution (iv) Tackling Water Pollution

III. "_____ is passed and effectively implemented" refers to the implementation of:

- (i) Amendment (ii) Legislation (iii) Legal punishments (iv) None of these

IV. Which word in paragraph 4 means 'flourishing' or 'increasing rapidly'?

V. Which problem is highlighted in the given passage?

- (i) Reduction of Ground Water. (ii) Droughts
(iii) Water Pollution (iv) All of the above

VI. According to the passage women in remote areas:

- (i) try to obtain little water (ii) have to travel long distances to get water
(iii) cause water pollution (iv) die due to thirst

VII. Which phrase in paragraph 2 means 'catering to various city agglomeration'?

VIII. Which of the following is a threat to the residents of Delhi?

1. Rising groundwater level 2. Lack of rainfall
3. Lack of the treatment of sewage 4. Yamuna is over polluted
4. Old pipelines

- (i) 1, 3 and 5 (ii) 3 and 4 (iii) 1, 2 and 5 (iv) None of these

Contd...2

IX. What according to the passage is the reason for most of the child deaths in India?

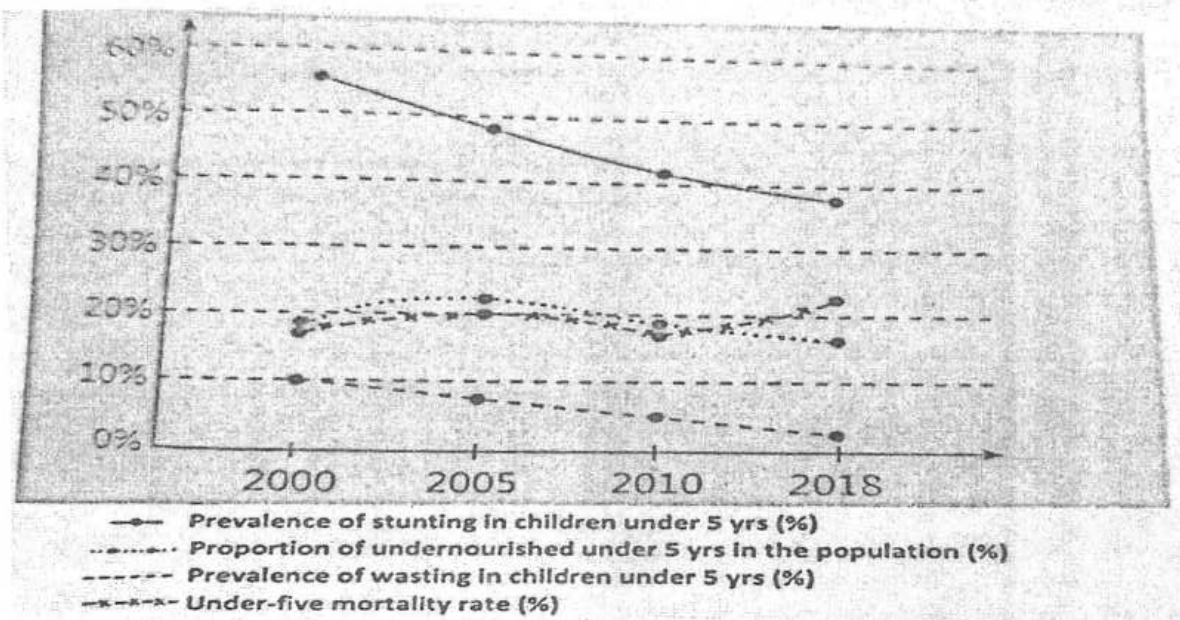
X. The industrial waste dumped in the river is/are:

- (i) putrefied paper (ii) metallic waste (iii) corrosive acids (iv) All of these

II. Read the passage given below.

1x10=10

- Children in India live in diverse circumstances and have equally diverse needs and rights. Along with their need to be educated, healthy, and skilful, they need, and have rights to adequate nutrition to live in a safe and supportive environment, have opportunities to reach their optimal potential and generally lead healthy, joyful and fulfilling lives so that they can become productive and well-adjusted citizens of tomorrow.
- Children in our country face many challenges. Many of them are first generation learners and face a myriad of problems throughout their schooling. Due to the socio-economic and cultural determinants, they may be vulnerable in many ways. Peer pressure and lack of positive role models may prompt them to make unsafe and unhealthy choices. Anxiety and depression amongst the students, to the point of turning them suicidal, have been a cause for concern in the recent past.
- Girls are more vulnerable and face discrimination at many levels from being unwelcome since birth to being pulled out of school for a variety of reasons. Dropping out of school, low motivation for academics and general disinterest in sports and physical activities are some of the problems that need to be addressed.
- Child malnutrition is rampant in most parts of the country. This has an adverse bearing on their cognitive capacities, learning performance and physical capacity. India is one amongst the many countries where child malnutrition is severe. Malnutrition is a major underlying cause of child mortality in India. Trends in various nutritional indicator values and U5 mortality rate from 2000 to 2018 are shown in the figure below:



- Our children have the right to have a good quality education, skill building facilities, a safe and supportive environment, positive role models, empowerment, and friendly health services and counselling. Well-informed and skilled children are likely to make better decisions concerning their careers and relationships, habits, physical and mental health, and also will be successful and an asset to the society.
- They also need to understand and deal with emerging issues like newly available career choices, pollution, water and energy conservation, global warming, protection of the environment, terrorism and disasters. Dealing with anxiety and depression, negative peer pressure, violence and accidents are some other significant issues that impact on individual's health and also the social, economic and health indicators of the country. Gender sensitivity, prevention of female infanticide and good parenting are some important social aspects that all children need to understand. Children require guidance and assistance - both covert and overt from their parents, teachers, peers and society in general to complete the various tasks of development and deal with such issues.

Based on your understanding of the passage, answer the questions given below:

1x10=10

I. According to the passage what may prompt children to make unsafe and unhealthy choices?

II. '_____ the problems that need to be addressed,' here 'addressed' refers to:

- (i) be looked into (ii) be rejected
 (iii) be written address on (iv) be mistaken

- III. Complete the following statement with an appropriate explanation. The passage presents the observation that:**
- (i) Children should be subjected to education only.
 - (ii) Children's problems should not be a major concern.
 - (iii) Children's growth should be a major concern for the society.
 - (iv) Children should not be given a new environment for growth.
- IV. What percentage of children under 5 years in 2005 didn't show stunting ?**
- (i) 80% (ii) 40% (iii) 38% (iv) 52%
- V. Which word in paragraph 4 means 'widely prevalent'?**
- VI. Choose the appropriate option :**
1. Virat, a young boy of 11 years has an inspiration to become an IAS officer so that he can serve the nation.
 2. Rohit an educator creates an awareness among the children about the complexities that arise in adolescence.
 - (i) (1) is an aspirant and (2) is a responsible citizen
 - (ii) (1) is a dreamer and (2) is a teacher
 - (iii) (1) is irresponsible and (2) is an aspirant
 - (iv) (1) is apprehensive and (2) is a student
- VII. Girls in India face discrimination:**
- (i) from the moment they're born
 - (ii) only before they're born
 - (iii) only in the initial period of their lives
 - (iv) from their mothers
- VIII. What was the most prevalent disease/disorder in children under 5 years in the year 2000?**
- IX. What percentage of under-5 mortality rate was recorded in the year 2000?**
- (i) 55% (ii) 30% (iii) 10% (iv) 25%
- X. Based on your understanding of the passage, pick the alternative that contains the inherent qualities of a role model.**
1. Believes in God
 2. Always guides others
 3. Promises the well-being of others
 4. Always inspires others
 5. Wastes time
- (i) 1 and 5 (ii) 2 and 4
(iii) 3 and 5 (iv) 4 and 5

SECTION B – GRAMMAR

- III. Attempt ANY TEN of the following questions. 1x10=10**
- (i) **Fill in the blank by choosing the correct option to complete the following sentence.**
Last evening I _____ to a chemist shop to buy medicine.
(a) was went (b) went (c) gone (d) will be going
- (ii) **Read the conversation given between Vivek and Ravi and complete the sentence that follows, by correct reporting.**
Vivek: Friend, I had sent flowers to my mother on Valentine's Day.
Ravi: What do you mean?
Vivek told Ravi that he had sent flowers to his mother on Valentine's day. Hearing this Ravi asked _____.
- (iii) **Select the correct option to fill in the blank for the given line.**
_____ they enjoy good health!
(a) Can (b) May (c) Might (d) Should

- (iv) Select the option that identifies the error and supplies the correction for the following line.

I would told my mother what somebody had said to me.

Option no.	Error	correction
(a)	would	will
(b)	told	tell
(c)	what	that
(d)	had	has

- (v) Complete the given narrative by filling in the blank with the correct option.

The plumber was called in last week to repair a leaking pipe and he _____ Rs 450 after the work was done.

- (a) paid (b) was paid (c) were paid (d) has paid

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

Subject: Irregular water supply in Ram Nagar.

Dear Sir/ Madam

I wish to draw the attention of the _____ (concern) authorities through this letter towards the irregular water supply in Ram Nagar for the past three months.

- (vii) A teacher has asked a question to a student. Report the teacher's question.

Do you believe in ghosts?

- (viii) Identify the error in the given sentence.

I visited a suburban village last year and were amazed to see people keeping the surroundings clean. Use the given format for your response.

Error	correction

- (ix) The leader of a political party addressed the audience about the right to vote. Report the question of audience.

Why should we vote?

- (x) Fill in the blank by choosing the correct option in the given sentence.

Dr. Gupta being a pass out of one of the best medical colleges of the world surely _____ be a good doctor.

- (a) must (b) can (c) could (d) ought

- (xi) Select the correct option to complete the narration of the dialogue between Vikram and Aditya.

Vikram: When will you leave for the airport tomorrow?

Aditya: I will leave at 8:00 am. Will you come with me?

Vikram asked Aditya when he would leave for the airport the next day. Aditya replied that he would leave at 8:00 AM. He further asked Vikram _____.

- (a) if he would come with him. (b) if he will come with him.
(c) if he shall come with him. (d) that he would go with him.

- (xii) Identify the error on a hoarding board and supply the correct word.

A free medical check up will be held at Sharma Memorial Hospital, Kanpur at 27 December 2022. Use the given format for your response.

Error	correction

SECTION B – CREATIVE WRITING SKILLS

10

5

- IV. (1) Attempt ANY ONE from A and B given below.

A. Mary's Convent School, Lodhi road, New Delhi needs some furniture like office chairs, tables, almirahs, glass tops for tables, etc. for its office. It also requires steel almirahs, bookshelves, book racks for its library. The Principal asks Mr. Vivek Verma, Head Clerk, to prepare a draft to place an order with Messrs Trustwell Furniture, New Delhi. Write the order letter in about 100 to 120 words.

OR

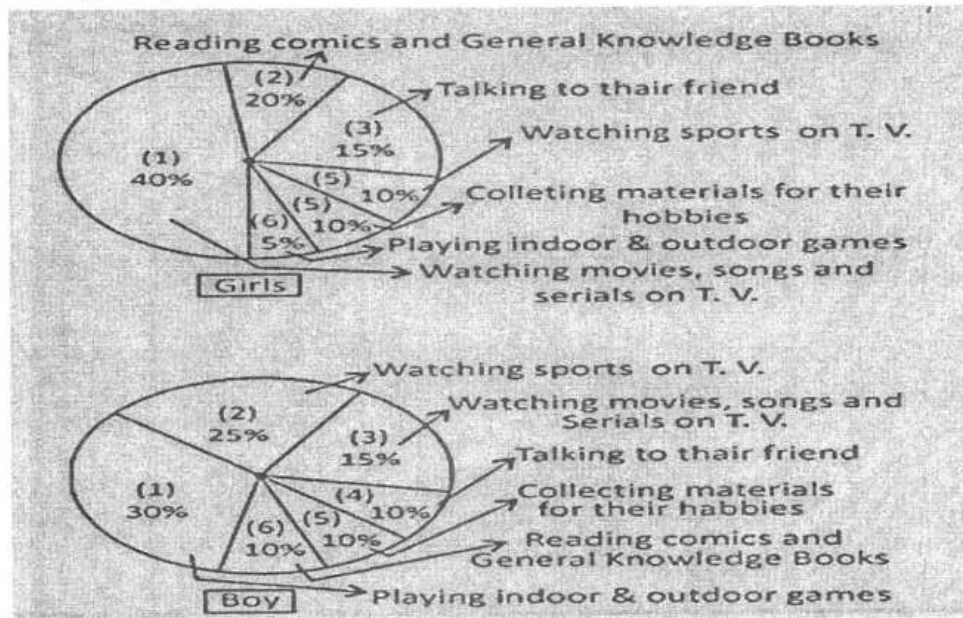
B. You are Vinita /Vinay Kapoor, Manager of Group Trip Travel Agency, Lajpat Nagar, New Delhi. Your company is organising a 2 night and 3 days trip for a group of 100 children and 10 teachers. You recently came across an advertisement of Hilltop Pine Resort, Nainital, Uttarakhand, about various holiday packages offered by them. Write a letter in about 100-120 words to the General Manager of this resort to find out about all the facilities offered and other necessary details required for organising a hassle-free trip.

Contd...5

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

5

A survey was conducted to find out how teenagers spend free time. Analysing the data given in the pie chart, together with your own ideas, write a paragraph in about 100 to 120 words on the topic 'How Teenagers Spend Their Free Time?'



B. Read the following excerpt from an article that appeared in the magazine section of a local daily.

The ban on single-use plastic is impractical. The purpose of articles like bags and packaging is ultimately to make human life easier. Plastic articles do this well so they shouldn't be banned.

Write a paragraph analysing the given argument in about 100-120 words.

SECTION C – LITERATURE

V. Reference to the Context.

10

1. Attempt any one of 2 extracts given.

5

A. Early in the New Year of 1956 I travelled to Southern Iraq. By then it had crossed my mind that I should like to keep an otter instead of a dog and that Camusfearna, ringed by water a stone's throw from its door, would be an eminently suitable spot for this experiment.

- What experiment was he going to do?
 - Travelling by air
 - Keep an otter as a pet
 - Staying in Iraq
 - None of these
- _____ was a suitable spot for his experiment.
 - An island
 - Iraq
 - Camusfearna
 - Australia
- Why was it a suitable spot for his experiment?
 - It was surrounded by water bodies.
 - No one lived there.
 - It was a zoo.
 - It was in Iraq.
- The phrase 'crossed my mind' means:
 - confused me
 - messed my mind
 - threatened me
 - came into my mind
- The synonym of 'ringed' is:
 - encircled
 - enclosed
 - surrounded
 - All of these

OR

B. Ebright has these qualities. From the time the book, *The Travels of Monarch X*, opened the world of science to him, Richard Ebright has never lost his scientific curiosity.

- It can be said that Ebright _____
 - was curious
 - has the will to win
 - has a first rate mind
 - All of these
- Who gave him the book, 'The Travels of Monarch X'?
 - his friend
 - his teacher
 - his mother
 - his father
- The book became in Ebright's life-
 - a turning point
 - a problem
 - a companion
 - None of the above
- 'The Travels of Monarch X' is about-
 - butterflies
 - kings
 - travel
 - All of these
- The synonym of curiosity is:
 - indifference
 - disinterest
 - keenness
 - apathy

Contd...6

2. Attempt any one of 2 extracts given.

A. 'long cramped boughs shuffling under the roof
like newly discharged patients
half dazed, moving
to the clinic doors.'

- (a) What are the boughs doing?
(i) Lying over the roof (ii) Shuffling under the roof
(iii) Climbing the roof (iv) None of these
- (b) The boughs are compared to:
(i) the roof (ii) moving objects (iii) newly discharged patients (iv) clinic doors
- (c) The name of the poet is:
(i) Walt Whitman (ii) Adrienne Rich (iii) G.L. Fuentes (iv) W.B. Yeats
- (d) 'Half dazed' means:
(i) Not fully conscious (ii) fully conscious (iii) not fully grown (iv) fully grown
- (e) Which poetic device is used in the first two given lines?
(i) Simile (ii) Alliteration (iii) Metaphor (iv) Anaphora

OR

B. 'Never shall a young man,
Thrown into despair
By those great honey coloured
Ramparts at your ear,
Love you for yourself alone
And not your yellow hair.'

- (a) _____ causes 'despair' to the young man.
(i) Anne's hair (ii) The environment (iii) The poet's hair (iv) Anne's voice
- (b) Who is the poet of the poem?
(i) Ogden Nash (ii) Walt Whitman (iii) Carl Sandburg (iv) None of these
- (c) The colour of the young woman's hair is:
(i) black (ii) golden (iii) brown (iv) red
- (d) The synonym of 'despair' is:
(i) expectation (ii) disappointment (iii) hope (iv) inspirit
- (e) Which poetic device is used in the fourth line?
(i) Simile (ii) Alliteration (iii) Metaphor (iv) Anaphora

III. Attempt ANY FOUR of the following in about 40 to 50 words each.

4x3=12

- What is the significance of the Buddha's request for a handful of mustard seeds and the addition of a condition to it?
- Valli's dream was to enjoy the ride on the bus to the nearest town. What preparations did she make to realise her dream?
- Why does the poet not offer another ball to the boy in the poem 'The Ball Poem'?
- What was the punishment that Mr. Keesing gave to Anne Frank for the first time? What did Anne write in her first essay?
- The poet describes the fog as a living being. Explain.

IV. Answer ANY TWO of the following in about 40 to 50 words each.

2x3=6

- Why was it difficult for Hari Singh to rob Anil?
- Why does Mrs. Hall find the scientist eccentric?
- Why did Think Tank decide to evacuate Mars?

V. Answer ANY ONE of the following in about 100 to 120 words.

1x6=6

- (i) The principle 'forgive and forget' helps a lot in maintaining cordial relations with our neighbours. Do you think Chubukov conveys this message in the play 'The Proposal'?

OR

- (ii) The dragon, Custard was considered a coward. The humble dragon proved his bravery in adversity. Analyse that certain qualities like bravery and courage are situational and spontaneous. Express your views with reference to the poem 'The Tale of Custard the Dragon'.

VI. Answer ANY ONE of the following in about 100 to 120 words.

1x6=6

- (i) Ostentation and vanity often land people in trouble. People should always try to live within their means. Aspirations have no limits but one should never forget the ground realities. Elaborate on the basis of the chapter 'The Necklace'.

OR

- (ii) 'And in her smiling eyes was the light of deep satisfaction that an artist feels when he is contemplating the completion of his masterpiece.' Imagine you are Bholi's teacher. You are overwhelmed with a sense of satisfaction to see the conversion of 'Bholi' to 'Sulekha'. Express your feelings in the form of a diary entry, stating what values made Bholi gain confidence.



दिल्ली पब्लिक स्कूल, भिलाई

दिनांक - 14.12.2022
कक्षा - दसवीं

पूर्व-मण्डल परीक्षा, 2022-'23
विषय - हिन्दी

समय - 3 घण्टे
पूर्णांक - 80

सामान्य निर्देश :

- इस प्रश्नपत्र में दो खण्ड हैं - खण्ड 'अ' और खण्ड 'ब'।
- खण्ड 'अ' में उपप्रश्नों सहित 45 वस्तुपरक प्रश्न पूछे गए हैं। दिए गए निर्देशों का पालन करते हुए कुल 40 प्रश्नों के उत्तर दीजिए।
- खण्ड 'ब' में वर्णनात्मक प्रश्न पूछे गए हैं, आंतरिक विकल्प भी दिए गए हैं।
- निर्देशों को बहुत सावधानी से पढ़िए और उनका पालन कीजिए।
- दोनों खण्डों के कुल 18 प्रश्न हैं। दोनों खण्डों के प्रश्नों के उत्तर देना अनिवार्य है।
- यथासंभव दोनों खण्डों के प्रश्नों के उत्तर क्रमशः लिखिए।

खण्ड - 'अ' (वस्तुपरक प्रश्न)

प्रश्न 1. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर इसके आधार पर सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए- (1x5=5)

आधुनिक युग में योग का महत्त्व बढ़ गया है। इसके बढ़ने का कारण व्यस्तता और मन की व्यग्रता है। यदि मनुष्य शारीरिक रूप से स्वस्थ है, तो वह संसार में रहकर जीवन का सुख भोग सकता है और अपने सभी कर्तव्यों एवं मनोकामनाओं को पूर्ण कर सकता है। शरीर ही वह माध्यम है, जिसके द्वारा हम अपने सभी कार्यों को संपन्न कर सकते हैं, इसलिए अपने शरीर को स्वस्थ रखना हमारा प्रथम कर्तव्य है और इसके लिए हम योग का सहारा ले सकते हैं।

योग प्राचीन समय से ही भारतीय संस्कृति का अंग रहा है। हमारे पूर्वजों ने बहुत समय पहले ही इसका आविष्कार कर इसके महत्त्व को पहचान लिया था, इसलिए योग पद्धति सदियों बाद भी जीवित है। योग करने से व्यक्ति का शरीर सुगठित और सुडौल बनता है। योग से न केवल तन की थकान दूर होती है, बल्कि मन की थकान भी दूर हो जाती है। योग करने वाला व्यक्ति अपने अंग-प्रत्यंग में एक नए उत्साह एवं स्फूर्ति का अनुभव करता है। योग करने से शरीर के प्रत्येक अंग में रक्त का संचार सुचारु रूप से होता है तथा शरीर रोगमुक्त रहता है।

(क) गद्यांश के अनुसार मनुष्य का प्रथम कर्तव्य किसे माना गया है ?

- | | |
|---------------------------|---------------------------------|
| (i) मन को स्वस्थ रखना | (ii) योग करना |
| (iii) शरीर को स्वस्थ रखना | (iv) प्राचीन संस्कृति को अपनाना |

(ख) योग करने से मनुष्य को क्या लाभ होता है?

- | | |
|------------------------------|--|
| (i) शरीर रोगमुक्त रहता है | (ii) नए उत्साह व स्फूर्ति का संचार होता है |
| (iii) मन की थकान दूर होती है | (iv) ये सभी |

(ग) 'योग प्राचीनकाल से भारतीय संस्कृति का अंग रहा है' इस कथन से क्या स्पष्ट होता है?

- | | |
|--|---|
| (i) पूर्वजों द्वारा योग का आविष्कार किया गया | (ii) पूर्वजों ने योग के महत्त्व को पहचान लिया |
| (iii) (i) और (ii) दोनों | (iv) पूर्वजों ने सिद्धांतों पर बल दिया |

(घ) गद्यांश हमें संदेश देता है कि -

- समय के साथ-साथ योग का महत्त्व घटता जा रहा है।
- शरीर को स्वस्थ रखने के लिए प्रतिदिन योग करना चाहिए।
- योग उसी व्यक्ति को करना चाहिए, जो शारीरिक रूप से कमजोर हो।
- योग प्राचीन समय से भारतीय संस्कृति का अंग रहा है।

निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए। उसके बाद दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए -

- (ङ) कथन (A) : आधुनिक युग में योग का महत्त्व स्वीकार किया जाने लगा है।
कारण (R) : आधुनिक युग में व्यस्तता और मन की व्याकुलता बढ़ने लगी है।

कूट

- कथन (A) तथा कारण (R) दोनों गलत हैं।
- कथन (A) गलत है लेकिन कारण (R) सही है।
- कथन (A) सही है लेकिन कारण (R) उसकी गलत व्याख्या करता है।
- कथन (A) तथा कारण (R) दोनों सही हैं तथा कारण (R) कथन (A) की सही व्याख्या करता है।

प्रश्न 2. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर इसके आधार पर सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए— (1x5=5)

संस्कृत में एक कहावत है कि दुर्जन दूसरों के राई के समान मामूली दोषों को पहाड़ के समान बड़ा बनाकर देखता है और अपने पहाड़ के समान बड़े पापों को देखते हुए भी नहीं देखता। सज्जन या महात्मा ठीक इसके विपरीत होते हैं। उनका ध्यान दूसरों की बजाय केवल अपने दोषों पर जाता है। अधिकांश व्यक्तियों में कोई-न-कोई बुराई अवश्य होती है। कोई भी बुराई न होने पर व्यक्ति देवता की कोटि में आ जाता है। मनुष्य को अपनी बुराइयों को दूर करने का प्रयत्न करना चाहिए, न कि दूसरों की कमियों को लेकर छींटाकशी करने या टीका-टिप्पणी करने का। अपने मन की परख मन को पवित्र करने का सबसे उत्तम साधन है। आत्मनिरीक्षण आत्मा की उन्नति का सर्वश्रेष्ठ मार्ग है। महात्मा कबीर ने कहा है कि जब मैंने मन की पड़ताल की तो मुझे अपने जैसा बुरा कोई न मिला। महात्मा गांधी ने कई बार स्पष्ट रूप से कहा था कि मैंने जीवन में हिमालय जैसी बड़ी भूल की है। अपनी भूलों को ध्यान देना या उन्हें स्वीकार करना आत्मबल का चिह्न है। जो लोग दूसरों के सामने अपनी भूल नहीं मानते और न ही अपने को दोषी स्वीकार करते हैं, वे सबसे बड़े कायर हैं। जिसका अंतःकरण शीशे के समान उजला है, उसे झट अपनी भूल महसूस हो जाती है। मन तो दर्पण है। मन में पाप है तो जग में पाप दिखाई देता है। पवित्र आचरण वाले मन को देखते हैं तो उन्हें लगता है कि अभी इसमें कोई कमी रह गई है। इसलिए वे अपने को बुरा कहते हैं। यही उनकी नम्रता व साधना है।

- सज्जन के चरित्र की क्या विशेषता है –
 (क) वह दूसरों के दोष देखता है (ख) वह अपने दोषों पर ध्यान देता है
 (ग) वह दूसरों को सुधारना चाहता है (घ) वह केवल अपना भला चाहता है
- कोई भी बुराई न होने पर मनुष्य किस श्रेणी में आ जाता है—
 (क) महात्मा की (ख) राक्षस की (ग) देवता की (घ) दुर्जन की
- आत्मा की उन्नति का सर्वश्रेष्ठ मार्ग क्या है—
 (क) आत्मनिरीक्षण (ख) परछिद्रान्वेषण (ग) भजन-पूजन (घ) दान-दक्षिणा
- सबसे बड़ा कायर कौन है—
 (क) जो युद्ध से भाग जाता है (ख) जो अपनी भूल स्वीकार करता है
 (ग) जो अपनी भूल स्वीकार नहीं करता है (घ) जिसका मन कलुषित होता है

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

कथन (A) : दुर्जन लोग अपने दोषों को सार्वजनिक कर देते हैं।

कारण (R) : सज्जन लोगों का ध्यान दूसरों की बजाय अपने दोषों पर जाता है।

- कथन (A) तथा कारण (R) दोनों गलत हैं।
- कथन (A) गलत है लेकिन कारण (R) सही है।
- कथन (A) सही है लेकिन कारण (R) कथन (A) की गलत व्याख्या करता है।
- कथन (A) तथा कारण (R) दोनों सही हैं तथा कारण (R) कथन (A) की सही व्याख्या करता है।

प्रश्न 3. निर्देशानुसार 'पदबंध' पर आधारित पाँच बहुविकल्पीय प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए – (1x4=4)

- 'धीरे-धीरे' नाव पानी में डूबती चली गई। वाक्य में रेखांकित है –
 (क) संज्ञा पदबंध (ख) विशेषण पदबंध (ग) क्रिया पदबंध (घ) क्रियाविशेषण पदबंध
- 'आप तो बहुत बड़े धार्मिक आदमी हैं।' इस वाक्य में विशेषण पदबंध है –
 (क) आप तो (ख) बहुत बड़े धार्मिक (ग) आदमी हैं (घ) पूरा वाक्य
- क्रिया पदबंध का उदाहरण छाँटिए –
 (क) उसके बाल सुंदर हैं।
 (ख) अयोध्या के राजा राम बड़े प्रतापी थे।
 (ग) कबीर ने उनका संकट दूर कर दिया।
 (घ) क्या काले कोट वाली वह तुम्हारी बेटी है?
- 'बंगले के पीछे लगा पेड़ गिर गया।' वाक्य में रेखांकित है –
 (क) संज्ञा पदबंध (ख) विशेषण पदबंध
 (ग) क्रिया पदबंध (घ) सर्वनाम पदबंध
- 'वह इधर-उधर देखता हुआ चल रहा था।' वाक्य में रेखांकित है –
 (क) क्रिया पदबंध (ख) क्रियाविशेषण पदबंध
 (ग) समुच्चयबोधक पदबंध (घ) विशेषण पदबंध

प्रश्न 4

निर्देशानुसार 'रचना के आधार पर वाक्य भेद' पर आधारित पाँच बहुविकल्पीय प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए - (1x4=4)

- (1) निम्नलिखित में से उपयुक्त सरल वाक्य छाँटिए-
- (क) जो कुछ पढ़ो, उसका अभिप्राय समझो।
 (ख) भाई साहब उपदेश देने की कला में निपुण थे।
 (ग) मैं उनकी लताड़ सुनता और आँसू बहाने लगता।
 (घ) वे तो वही देखते हैं जो पुस्तक में लिखा है।
- (2) 'बड़े भाई साहब ने भी उसी उम्र में पढ़ना शुरू किया था, जब मैंने शुरू किया था।' रचना की दृष्टि से वाक्य है-
- (क) सरल वाक्य (ख) संयुक्त वाक्य
 (ग) मिश्रित वाक्य (घ) विधानवाचक वाक्य
- (3) 'सालाना इम्तिहान में मैं पास हो गया और दरजे में प्रथम आया।' रूपांतरित करने पर इस वाक्य का मिश्र वाक्य होगा-
- (क) सालाना इम्तिहान में मैं पास होकर दरजे में प्रथम आया।
 (ख) सालाना इम्तिहान हुआ, मैं पास हो गया और दरजे में प्रथम आया।
 (ग) मैं पास हो गया और दरजे में प्रथम आया क्योंकि सालाना इम्तिहान हुआ।
 (घ) जब सालाना इम्तिहान हुआ तो मैं उसमें पास हो गया और दरजे में प्रथम आया।
- (4) निम्नलिखित वाक्यों में संयुक्त वाक्य है-
- (क) संसार की रचना कैसे भी हुई हो लेकिन धरती किसी एक की नहीं है।
 (ख) सहसा नारियल के झुरमुटों में उसे एक आकृति कुछ साफ हुई।
 (ग) बार-बार तताँरा का याचना भरा चेहरा उसकी आँखों में तैर जाता था।
 (घ) मेरे जीवन में यह पहली बार है मैं इस तरह से विचलित हुआ हूँ।
- (5) निम्नलिखित वाक्यों में मिश्र वाक्य है-
- (क) मेरे और भाई साहब के बीच अब केवल एक दरजे का अंतर और रह गया।
 (ख) आखिर आदमी को कुछ तो अपनी पोजीशन का ध्यान रखना चाहिए।
 (ग) जब से माताजी ने प्रबंध अपने हाथ में ले लिया है, तब से घर में लक्ष्मी आ गई है।
 (घ) मेरे रहते तुम बेराह न चलने पाओगे।

प्रश्न 5

निर्देशानुसार 'समास' पर आधारित पाँच बहुविकल्पीय प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए- (1x4=4)

(क) निम्नलिखित युग्मों पर विचार कीजिए-

समस्त पद समास

1. हवनसामग्री - तत्पुरुष समास
2. देवमूर्ति - अव्ययीभाव समास
3. स्त्रीरत्न - बहुव्रीहि समास
4. वचनामृत - कर्मधारय समास

उपर्युक्त युग्मों में से कौन-से सही सुमेलित हैं-

- (i) 1 और 2 (ii) 2 और 3
 (iii) 3 और 4 (iv) 1 और 4

(ख) 'चौराहा' शब्द का सही समास-विग्रह होगा-

- (i) चार राहों वाला - तत्पुरुष समास (ii) चार राहों का समाहार - द्विगु समास
 (iii) चार हैं जो राहें - कर्मधारय समास (iv) राहों में चार हैं जो - द्वंद्व समास

(ग) 'स्वर्ग-नरक' समस्तपद का विग्रह होगा-

- (i) नरक अथवा स्वर्ग (ii) स्वर्ग और नरक
 (iii) स्वर्गरूपी नरक (iv) स्वर्ग है जो नरक

(घ) 'देशोद्धार' शब्द के लिए सही समास-विग्रह और समास का चयन कीजिए

- (i) देश का उद्धार - तत्पुरुष समास
 (ii) देश के लिए उद्धार - बहुव्रीहि समास
 (iii) देश में उद्धार - कर्मधारय समास
 (iv) देश और उद्धार - द्वंद्व समास

(ङ) 'शोकमग्न' शब्द में कौन-सा समास है -

- (i) तत्पुरुष समास (ii) अव्ययीभाव समास
 (iii) कर्मधारय समास (iv) द्विगु समास

प्रश्न 6. निर्देशानुसार मुहावरे पर आधारित छह बहुविकल्पीय प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए— (1x4=4)

- (1) मुहावरे और अर्थ के उचित मेल वाले विकल्प का चयन कीजिए—
 (क) बाट जोहना — राह देखना
 (ख) गाँठ बाँध लेना — खतरा उठाना
 (ग) हँसी खेल — हँसती रहना
 (घ) सुध-बुध खोना — मदद करना
- (2) 'लांछन लगाना' के लिए उचित मुहावरा है—
 (क) काम तमाम करना (ख) चार चाँद लगाना
 (ग) कीचड़ उछालना (घ) आड़े हाथों लेना
- (3) गणित का गृहकार्य करना मुझे प्रतीत होता है।
 (क) फूलों की सेज (ख) लोहे के चने चबाना
 (ग) गड़े मुर्दे उखाड़ना (घ) अंधे की लकड़ी
- (4) मालिक ने नौकर को चोरी करते लिया।
 (क) रँगे हाथों पकड़ना (ख) नौ दो ग्यारह होना
 (ग) लकीर का फकीर होना (घ) लोहे के चने चबाना
- (5) रेखांकित अंश के लिए कौन-सा मुहावरा प्रयुक्त करना उचित रहेगा?
 संतों की बातों को हमेशा याद रखना चाहिए।
 (क) सिर पर खड़े रहना (ख) आँखें खुली रखना
 (ग) गाँठ बाँध लेना (घ) उल्लू सीधा करना
- (6) 'अंधे के हाथ बटेर लगना' का अर्थ है—
 (क) अच्छा भाग्य (ख) अच्छी वस्तु प्राप्त होना
 (ग) भाग्यवश अच्छी वस्तु प्राप्त होना (घ) अंधे व्यक्ति को बटेर प्राप्त होना

प्रश्न 7. निम्नलिखित पद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर के लिए सही विकल्प का चयन कीजिए — (1x5=5)

राह कुर्बानियों की न वीरान हो
 तुम सजाते ही रहना नए काफिले
 फतह का जश्न इस जश्न के बाद है
 जिंदगी मौत से मिल रही है गले
 कट गए सर हमारे तो कुछ गम नहीं
 अब तुम्हारे हवाले वतन साथियो !

- (क) 'नए काफिले' से क्या तात्पर्य है?
 (i) तीर्थयात्रियों की टोली (ii) युद्ध के लिए तैयार सैनिकों की टोली
 (iii) नए बलिदानी देशभक्तों की टोली (iv) युद्ध का प्रशिक्षण पाए हुए नए सैनिकों की टोली
- (ख) सैनिक किसे सजाने की बात कर रहा है—
 (i) भारत माता के मस्तक को (ii) जश्न मनाने वालों को
 (iii) देश की कुर्बानियों को (iv) बलिदानी सैनिकों के जत्थों को
- (ग) 'राह कुर्बानियों की न वीरान हो' पंक्ति का क्या आशय है ?
 (i) सैनिक देश के बारे में सोचते रहे (ii) बलिदानी सैनिकों की परंपरा बनी रहे
 (iii) सैनिक सोच-समझकर आगे बढ़ें (iv) बलिदानी सैनिक आगे बढ़ने की सोच में रहें
- (घ) 'सिर पर कफन बाँधने' का किस ओर संकेत है ? —
 (i) जीवित रहने की ओर (ii) सिर बचाने की ओर
 (iii) देश पर बलिदान होने की ओर (iv) सिर पर मुकुट बाँधने की ओर
- (ङ) निम्नलिखित वाक्यों को ध्यानपूर्वक पढ़िए—
 (1) बाह्य आडंबरों का विरोध करना चाहिए।
 (2) देश की रक्षा के लिए सदैव तैयार रहना चाहिए।
 (3) बलिदानी देशभक्तों की कमी नहीं होनी चाहिए।
 (4) प्राकृतिक सौंदर्य के लिए ईश्वर को धन्यवाद देना चाहिए।
 (5) पद्यांश की पृष्ठभूमि भारत-चीन युद्ध की ऐतिहासिक घटना है।
 पद्यांश से मेल खाते वाक्यों के लिए उचित विकल्प चुनिए—
 (i) 1, 2 और 3 (ii) 1, 3 और 5
 (iii) 2, 3 और 5 (iv) 2, 4 और 5

प्रश्न 8. निम्नलिखित प्रश्नों के उत्तर देने के लिए उचित विकल्प का चयन कीजिए –

(1x2=2)

- (1) कबीर के अनुसार संसार में सुखी कौन है—
 (i) जो भजन करता है (ii) जो पैसा कमाता है
 (iii) जो खाता और सोता है (iv) जो पढ़ता-लिखता है
- (2) 'आत्मत्राण' का क्या अर्थ है—
 (i) आपत्ति और दुख (ii) अपनी रक्षा स्वयं करना
 (iii) आत्मा का उत्थान (iv) आत्मा का पतन

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

ग्वालियर में हमारा एक मकान था, उस मकान के दालान में दो रोशनदान थे। उसमें कबूतर के एक जोड़े ने घोंसला बना लिया था। एक बार बिल्ली ने उचककर दो में से एक अंडा तोड़ दिया। मेरी माँ ने देखा तो उसे दुःख हुआ। उसने स्टूल पर चढ़कर दूसरे अंडे को बचाने की कोशिश की। लेकिन इस कोशिश में दूसरा अंडा उसी के हाथ से गिरकर टूट गया। कबूतर परेशानी में इधर-उधर फड़फड़ा रहे थे। उनकी आँखों में दुःख देखकर मेरी माँ की आँखों में आँसू आ गए। इस गुनाह को खुदा से मुआफ़ कराने के लिए उसने पूरे दिन रोजा रखा। दिन-भर कुछ खाया पिया नहीं। सिर्फ रोती रही और बार-बार नमाज़ पढ़-पढ़कर खुदा से इस गलती को मुआफ़ करने की दुआ माँगती रही।

- (क) लेखक की माँ द्वारा कबूतर के अंडे तोड़ने पर रोजा रखना पशु-पक्षियों के प्रति उनकी को दर्शाता है।
 (i) आत्मीयता (ii) दयालुता (iii) (i) और (ii) दोनों (iv) धार्मिकता
- (ख) रोजे के दौरान लेखक की माँ क्या करती रही ?
 (i) खाती-पीती रही (ii) सिर्फ रोती रही (iii) दान करती रही (iv) घर का काम करती रही
- (ग) लेखक की माँ से कबूतर का अंडा टूट जाने पर उनकी मनःस्थिति कैसी थी ?
 (i) वह मन-ही-मन अत्यंत दुःखी थी (ii) वह सहज एवं गंभीर थी
 (iii) वह धार्मिक मान्यताओं के प्रति उदासीन थी (iv) वह अत्यंत खुश थी
- (घ) इस गद्यांश के माध्यम से हमें क्या संदेश मिलता है ?
 (i) हमें प्रकृति के प्रति संवेदनशील होना चाहिए
 (ii) हमें पशु-पक्षियों के प्रति सहानुभूतिपूर्ण व्यवहार करना चाहिए
 (iii) (i) और (ii) दोनों
 (iv) हमें रोजा रखना चाहिए
- (ङ) कथन (A) कबूतर परेशानी में इधर-उधर फड़फड़ा रहे थे।
 कारण (R) उनके अंडों को बिल्ली ने तोड़ दिया था।
 (क) कथन (A) तथा कारण (R) दोनों सही हैं।
 (ख) कथन (A) व कारण (R) दोनों गलत हैं।
 (ग) कथन (A) सही है लेकिन कारण (R) उसकी सही व्याख्या करता है।
 (घ) कथन (A) सही है तथा कारण (R) गलत है।

प्रश्न 10. निम्नलिखित प्रश्नों के उत्तर देने के लिए उचित विकल्प का चयन कीजिए –

(1x2=2)

- (क) राजकपूर के संबंध में कौन-सी बातें कही जाती हैं –
 (अ) फिल्म समीक्षक उन्हें आँखों से बोलनेवाला कलाकार मानते हैं।
 (ब) राजकपूर ने 'संगम' फिल्म के अपने जीवन का सर्वश्रेष्ठ अभिनय किया था।
 (स) राजकपूर अपने समय के महान 'शोमैन' कहे जाते रहे हैं।
 (द) राजकपूर ने शैलेन्द्र से 'तीसरी कसम' फिल्म का पूरा पारिश्रमिक एडवांस माँगा था।
 (i) केवल अ और स सही हैं (ii) ब, स, द सही हैं
 (iii) अ, स, द सही हैं (iv) चारों कथन सही हैं
- (ख) कर्नल कालिंज का खेमा जंगल में क्यों लगा हुआ था—
 (i) वजीर अली को पकड़ने के लिए
 (ii) शेर को पकड़ने के लिए
 (iii) आज़ादी की जंग के लिए
 (iv) उपर्युक्त में से कोई नहीं

खण्ड - 'ब' (वर्णनात्मक प्रश्न)

प्रश्न 11. निम्नलिखित प्रश्नों में से किन्हीं दो के उत्तर लगभग 60 शब्दों में दीजिए - (3x2=6)

- आदर्श और व्यावहारिकता में क्या अंतर है? शुद्ध आदर्श और व्यावहारिकता की तुलना लेखक ने सोने और ताँबे से क्यों की है ?
- बड़े भाई साहब की स्वभावगत विशेषताएँ बताइए अथवा बड़े भाई साहब का चरित्र-चित्रण कीजिए।
- इस वर्ष आपने पाठ्यक्रम में लोककथा पर आधारित एक कहानी पढ़ी है। यह प्रेम और प्रेम के प्रति समाज के नजरिए की कहानी है। इस पाठ से प्राप्त सीख का वर्णन कीजिए।

प्रश्न 12. निम्नलिखित प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 60 शब्दों में दीजिए - (3x2=6)

- इस वर्ष आपने मनुष्यता के बारे में एक कविता पढ़ी है। संबंधित कविता के आधार पर लिखिए कि कवि ने किन-किन सदगुणों को मनुष्यता के लिए आवश्यक माना है ?
- आपके पाठ्यक्रम में पर्वतीय क्षेत्रों में वर्षा-ऋतु के सौंदर्य-वर्णन पर आधारित कविता है। संबंधित कविता में वर्णित प्रकृति के दृश्यों का वर्णन अपने शब्दों में कीजिए।
- 'आत्मत्राण' कविता का केन्द्रीय भाव अथवा प्रतिपाद्य अपने शब्दों में लिखिए।

प्रश्न 13. निम्नलिखित प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 60 शब्दों में दीजिए - (3x2=6)

- यदि आपके आसपास हरिहर काका जैसी हालत में कोई हो तो आप उसकी किस प्रकार मदद करेंगे ?
- 'मित्रता जाति व भाषा के बंधनों से परे होती है।' 'टोपी शुक्ला' पाठ के आधार पर अपने विचार व्यक्त कीजिए।
- नई श्रेणी में जाने और नई कापियों और पुरानी किताबों से आती विशेष गंध से लेखक का बालमन क्यों उदास हो उठता था ? 'सपनों के-से दिन' पाठ के आधार पर उत्तर दीजिए।

प्रश्न 14. निम्नलिखित में से किसी एक विषय पर संकेत-बिन्दुओं के आधार पर लगभग 100 शब्दों में अनुच्छेद लिखिए - (5x1=5)

- | | | |
|-------------------------------------|-------------------------------|----------------------------------|
| (i) समाज निर्माण में नारी का योगदान | (ii) विज्ञापनों से भरी दुनिया | (3) इंटरनेट : विज्ञान का चमत्कार |
| • वर्तमान युग में नारी की स्थिति | • विज्ञापन का युग | • विज्ञान की अद्भुत उपलब्धि |
| • नारी की भूमिका | • विज्ञापन का प्रभाव | • इंटरनेट के लाभ |
| • भारतीय नारी : शक्ति का पर्याय | • विज्ञापन के लाभ | • इंटरनेट से हानि |
| • उपसंहार | • विज्ञापन की हानियाँ | • उपसंहार |

प्रश्न 15. आसमान छूती महँगाई से सामान्य जनता त्रस्त है। बढ़ती हुई महँगाई के प्रति चिंता व्यक्त करते हुए "दैनिक भास्कर" के संपादक को एक पत्र लिखिए। (शब्द सीमा लगभग 100 शब्दों में) (5x1=5)

अथवा

आपके मोहल्ले में बच्चों के खेलने के लिए किसी प्रकार की व्यवस्था नहीं है। नगर निगम के आयुक्त को लगभग 100 शब्दों में पत्र लिखकर बाल उद्यान (पार्क) बनवाने की प्रार्थना कीजिए।

प्रश्न 16. निम्नलिखित में से किसी एक विषय पर लगभग 80 शब्दों में सूचना लिखिए - (4x1=4)

- विद्यालय के प्राचार्य की ओर से विद्यार्थियों को विद्यालय परिसर में मोबाइल फोन न लाने संबंधी एक सूचना लगभग 80 शब्दों में लिखिए।

अथवा

- आपकी एक महत्त्वपूर्ण पुस्तक विद्यालय में कहीं खो गई है। उसे लौटाने की अपील करते हुए लगभग 80 शब्दों में एक सूचना लिखिए।

प्रश्न 17. निम्नलिखित में से किसी एक विषय पर लगभग 60 शब्दों में विज्ञापन तैयार कीजिए- (3x1=3)

- 'पर्यावरण संरक्षण' विषय पर लगभग 60 शब्दों में एक आकर्षक विज्ञापन तैयार कीजिए।

अथवा

- यातायात के नियमों का पालन करने हेतु लगभग 60 शब्दों में विज्ञापन लिखिए।

प्रश्न 18. 'एकता में बल होता है' विषय पर लगभग 100 शब्दों में एक लघुकथा लिखिए। (5x1=3)

अथवा

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 एक ई-मेल लिखिए।



General Instructions:

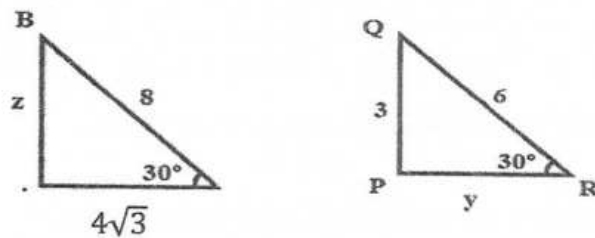
1. This Question Paper has 5 Sections A-E.
2. Section A has 20 MCQs carrying 1 mark each.
3. Section B has 5 questions carrying 2 marks each.
4. Section C has 6 questions carrying 3 marks each.
5. Section D has 4 questions carrying 5 marks each.
6. Section E has 3 case based integrated units of assessment (4 marks each) with sub-parts of the values of 1, 1 and 2 marks each respectively.
7. All Questions are compulsory. However, an internal choice in 2 Qs. Of 5 marks, 2 Qs of 3 marks and 2 Questions of 2 marks has been provided. An internal choice has been provided in the 2 marks questions of Section E.
8. Draw neat figures wherever required. Take $\pi = 22/7$ wherever required if not stated.

SECTION - A

Section A consists of 20 questions of 1 mark each.

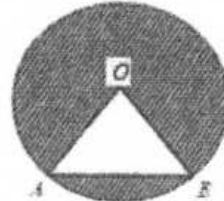
01. Two dice are thrown together. The probability that sum of the two numbers be a multiple of 4 is
(a) $\frac{1}{2}$ (b) $\frac{1}{3}$ (c) $\frac{1}{8}$ (d) $\frac{1}{4}$
02. If two tangents inclined at an angle 60° are drawn to a circle of radius 4 cm, then the length of each tangent is equal to
(a) $\frac{4}{\sqrt{3}}$ cm (b) 4 cm (c) $4\sqrt{3}$ cm (d) $2\sqrt{3}$ cm

03.



In the above figure, if $\Delta ABC \sim \Delta PQR$, they $y + z$ equals

- (a) $2 + \sqrt{3}$ (b) $4 + 3\sqrt{3}$ (c) $4 + \sqrt{3}$ (d) $3 + 4\sqrt{3}$
04. Find the value of k for which the system of equation $x + 3y = 4$ and $3x + ky + 12 = 0$ are inconsistent.
(a) $k = 12$ (b) $k = -12$ (c) $k = 9$ (d) $k = -9$
05. The quadratic equation $x^2 - 5x + 6 = 0$ has
(a) Two distinct real roots. (b) Two equal real roots.
(c) No real roots (d) More than two real roots
06. If $\sin 2A = 2\sin A$ is true then A is
(a) 0° (b) 30° (c) 45° (d) 60°
07. If the corresponding medians of two similar triangles are in the ratio 5:7, then the ratio of their corresponding sides is
(a) 25:49 (b) 5:7 (c) 7:5 (d) 49:25
08. O is the centre of a circle of radius 5 cm. The chord AB subtends an angle of 60° at the centre. Area of the shaded region is equal to (approximately)

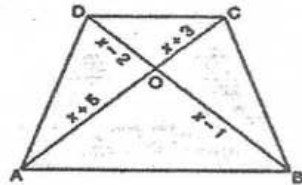


- (a) 50 sqm (b) 62.78 sqm (c) 67.74 sqm (d) 49.88 sqm
09. Suppose the height and radius of a solid cylinder are 15 cm and 6 cm, respectively. A cone is carved out from the cylinder, then the maximum height of cone will be
(a) 6 cm (b) 15 cm (c) 13 cm (d) 17 cm
10. The exponent of 3 in the prime factorisation of 3780 is
(a) 3 (b) 4 (c) 5 (d) (6)

11. The zeroes of quadratic polynomial $x^2 + 25x + 156$ are
 (a) Both positive (b) Both negative
 (c) One positive and one negative (d) Can't be determined
12. Points $A(-1, y)$ and $B(5, 7)$ lie on a circle with centre $(2, -3y)$ then the values of y are
 (a) $1, -7$ (b) $-1, 7$ (c) $2, 7$ (d) $-2, -7$
13. If θ is an acute angle and $\tan\theta + \cot\theta = 2$, then the value of $\sin^3\theta + \cos^3\theta$ is
 (a) 1 (b) $\frac{1}{2}$ (c) $\frac{\sqrt{2}}{2}$ (d) $\sqrt{2}$
14. If two cubes of edge 3 cm each are joined end to end, then the surface area of the resulting solid is
 (a) 90 sq cm (b) 95 sq cm (c) 92 sq cm (d) 94 sq cm
15. For the following distribution, the sum of the lower limits of the medium and modal class is

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

- (a) 15 (b) 25 (c) 30 (d) 25
16. In the given figure, if $AB \parallel CD$, find the value of x



- (a) 7 (b) 8 (c) 8.5 (d) 7.5
17. If $\tan^2 45 - \cos^2 30 = x \sin 45 \cos 45$, then the value of x is
 (a) 2 (b) -2 (c) $\frac{-1}{2}$ (d) $\frac{1}{2}$
18. The time (in seconds) taken by 130 athletes to run a 200 m race are tabulated below:

Class	13-15	15-17	17-19	19-21	21-23
Frequency	30	20	25	15	40

The number of athletes who completed the race in less than 19 seconds is
 (a) 70 (b) 75 (c) 50 (d) 90

ASSERTION – REASON BASED QUESTIONS

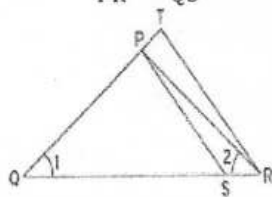
In the following question, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

- (a) Both A and R are true and R is the correct explanation of A.
 (b) Both A and R are true but R is not the correct explanation of A.
 (c) A is true but R is false.
 (d) A is false but R is true.
19. **Assertion (A)** : If product of two numbers is 5780 and their HCF is 17, then their LCM is 340.
Reason (R) : HCF is always a factor of LCM.
20. **Assertion (A)** : If the co-ordinates of the mid points of the sides AB and AC of a ΔABC are $D(3, 5)$ and $E(-3, 3)$ respectively then BC is equal to 20 units.
Reason (R) : The line joining the mid points of two sides of a triangle is parallel to the third side and equal to half of it.

SECTION – B

Section B consists of 5 questions of 2 marks each.

21. If $49x + 51y = 499$ and $51x + 49y = 501$, then find the value of x and y .
22. In the figure given below if $\frac{QT}{PR} = \frac{QR}{QS}$ and $L1 = L2$, prove that $\Delta PQS \sim \Delta TQR$.

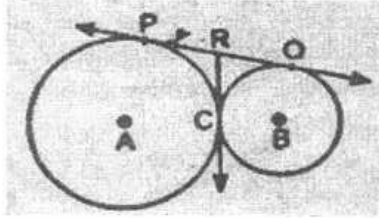


23. If $4\tan\theta = 3$, Evaluate $\frac{4\sin\theta - \cos\theta + 1}{4\sin\theta + \cos\theta - 1}$

OR

If $\cot\theta = \frac{9}{40}$, find the values of $\operatorname{cosec}\theta$ and $\sec\theta$.

24. Two circles touch each other at point C. Prove that the common tangent to the circles at C bisects the common tangent at P and Q.



25. If the perimeter of a semi-circular protractor is 108 cm, find the diameter of the protractor.

OR

The length of the minute hand of a clock is 6 cm. Find the area swept by it when it moves from 7:05 pm to 7:40 pm.

SECTION – C

Section C consists of 6 questions of 3 marks each.

26. Given that $\sqrt{5}$ is irrational, prove that $3 + 2\sqrt{5}$ is irrational.
27. Find the zeroes of the quadratic polynomial $f(x) = x^2 + 2\sqrt{2}x - 6$ and verify the relationship between the zeroes and their coefficients.
28. The sum of ages of a father and his son is 45 years. Five years ago, the product of their ages (in years) was four times the man's age at that time. Find their present ages.

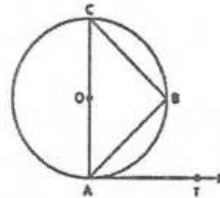
OR

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

29. In $\triangle OPQ$ right angled at P, $OP = 7$ cm, $OQ - PQ = 1$ cm. Determine the values of $\sin Q$ and $\cos Q$.
30. A circle touches the sides of a quadrilateral ABCD at P, Q, R & S respectively. Show that the angles subtended at the centre by a pair of opposite sides are supplementary.

OR

AB is a chord of a circle with centre O, AOC is a diameter and AT is the tangent at A. Prove that $\angle BAT = \angle ACB$.



31. A card is drawn at random from a pack of 52 cards. Find the probability that the card drawn is
 (a) either a black card or a king (b) other than ace (c) neither a king nor a queen.

SECTION – C

Section D consists of 4 questions of 5 marks each.

32. Solve : $\frac{x-1}{x-2} + \frac{x-3}{x-4} = 3\frac{1}{3}$ $x \neq 2, 4$

OR

The numerator of a fraction is 3 less than the denominator. If 2 is added to both the numerator and denominator, then the sum of the new fraction and the original fraction is $\frac{29}{20}$, find the original fraction.

33. Prove that if a line divides any two sides of a triangle in the same ratio, then the line must be parallel to third side.
34. From a solid right circular cylinder with height 12 cm and radius of the base 5 cm, a right circular cone of the same height and same radius is removed. Find the volume and total surface area of the remaining solid. (Use $\pi = 3.14$)

OR

A juice seller was serving juice to his customers using cylindrical glass tumblers. The inner diameter of the tumbler was 5 cm. but bottom of the tumbler had a hemispherical raised portion which reduced the capacity of the tumbler. If the height of the tumbler was 10 cm., find the apparent and actual capacity of the tumbler. (Use $\pi = 3.14$)

Contd...4

35. A study of the field of 150 tomato plants resulted in the following record:

Tomatoes per plant	1-6	6-11	11-16	16-21	21-26
Number of plants	20	50	46	22	12

Calculate the median and mode of the number of tomatoes per plant.

SECTION – E

(Case study-based questions are compulsory)

36. In an examination hall, the examiner makes students sit in such a way that no student can cheat from any other students and make no student sit uncomfortably. So the teacher decides to mark the numbers on each chair 1, 2, 3... . There are 25 students and each student is seated at alternate positions in the examination room such that the sequence formed is 1, 3, 5,

Use the above information to solve the following questions:

- (a) What type of sequence is formed to follow the seating arrangement of students in the examination room?
- (b) If a, b, c are in AP, then what is the relation between them?
- (c) What is the seat number of the last student in the examination room?

OR

What is the seat number of 10th vacant seat in the examination room?

37. We all have seen the airplanes flying in the sky but might have not thought of how they actually reach the correct destination. Air traffic Control (ATC) is a service provided by ground based air traffic controllers who direct aircraft on the ground and through a given section of controlled airspace, and can provide advisory services to aircraft in non controlled airspace. Actually, all this air traffic is managed and regulated by using various concepts based on co-ordinate geometry and trigonometry.

At a given instance, ATC finds that the angle of elevation of an airplane from a point on the ground is 60°. After a flight of 30 seconds, it is observed that the angle of elevation changes to 30°. The height of the plane remains constantly at $3000\sqrt{3}$ m. Use the above information to answer the questions given below:

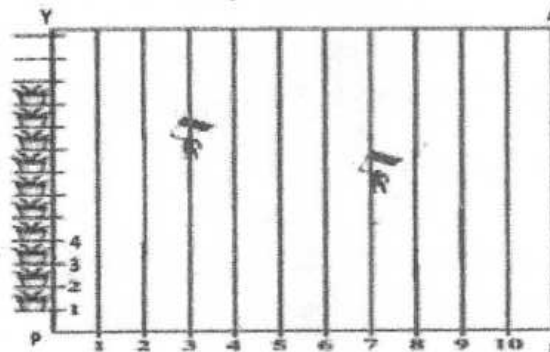
- (i) Draw a neat labelled figure to show the above situation diagrammatically.
- (ii) What is the distance travelled by the plane in 30 seconds?

OR

Keeping the height constant, during the above flight, it was observed that after $15(\sqrt{3} - 1)$ seconds, the angle of elevation changed to 45°. How much is the distance travelled in that duration?

- (iii) What is the speed of the plane in km/hr with respect to second condition?

38. On Annual Sports Day of a school, parallel lines have been drawn with lime powder at a distance of 1 m from each other in a rectangular shaped school playground. 80 plastic cones have been placed at a distance of 1 m from each other along PY as shown in figure. Pushpendra runs $\frac{1}{4}$ th distance PY on the 3rd line and post a yellow flag. Pankaj runs $\frac{1}{5}$ th the distance PY of the 7th line and posts a blue flag.



Use the above information to solve the following questions:

- (1) What is the co-ordinate of yellow flag?
- (2) What is the distance between both the flags?
- (3) If Raman has to post a green flag exactly half way between the line segment joining the two flags, where should he post the flags?

OR

If Raman changes his position and posts a green flag at a point between the line segment joining the two flags, then what is the co-ordinate of the green flag which divides the line segment internally in the ratio 1:2 ?



सामान्य-निर्देशाः

1. कृपया सम्यक् परीक्षणं कुर्वन्तु यत् अस्मिन् प्रश्नपत्रे 18 प्रश्नाः सन्ति ।
2. अस्मिन् प्रश्नपत्रे चत्वारः खण्डाः सन्ति ।
3. प्रत्येकं खण्डम् अधिकृत्य उत्तराणि एकस्मिन् स्थाने क्रमेण लेखनीयानि ।
4. उत्तरलेखनात् पूर्वं प्रश्नस्य क्रमाङ्कः अवश्यं लेखनीयः ।
5. प्रश्नक्रमाकः प्रश्नपत्रानुसारं एव लेखनीयः ।
6. सर्वेषां प्रश्नानाम् उत्तराणि संस्कृतेन लेखनीयानि ।
7. प्रश्नानां निर्देशाः ध्यानेन अवश्यं पठनीयाः ।

'क' खण्डः अपठितावबोधनम् - 10 अङ्काः

1. अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत - (10)
उत्तरप्रदेशराज्ये जौनपुरजनपदे अवस्थितः 'उकनी' नामधेयः एकः ग्रामः वर्तते । तत्र संस्कृतगङ्गा रात्रिन्दिवं प्रवहमाना अस्ति । 'आत्मा वै जायते पुत्रः' इति जनश्रुतिं यथार्थं कुर्वन् अश्वत्थवृक्षस्य छायायां भगवतः शिवस्य आराधनायां तल्लीनः एकः विद्वान् अस्ति । विदुषः नाम पं.प्रदीपनारायणत्रिपाठिवर्यः । सः तु नव्यन्यायव्याकरणसाहित्यशास्त्रेषु पारङ्गतः स्वर्णपदकविजेता च अस्ति । तस्य जिह्वायां साक्षात् सरस्वती विराजिता अस्ति । तेषां पूर्वजैः स्थापितं एकं गुरुकुलम् वर्तते । गुरुकुलम् निकषा एकः प्राचीनः कूपः अपि अस्ति । कूपस्य जलं पीत्वा कश्चित् जनः मूर्खः न भवति, एषा धारणा प्रचलिता अस्ति । तत्र संस्कृतज्ञानपिपासवः देशदेशान्तरेभ्यः आगत्य स्वीयां पिपासां शान्तां कृत्वा प्रसन्नाः तृप्ताः च भवन्ति । वस्तुतः धन्योऽयं विद्वान् तस्मै मम शिरसा प्रणामाः ।
- I. एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्) (1x2=2)
 - (i) 'उकनी' नामधेयः ग्रामः कुत्र अस्ति ?
 - (ii) गुरुकुलम् कैः स्थापितम् अस्ति ?
 - (iii) त्रिपाठिवर्यः केषु शास्त्रेषु पारङ्गतः ?
- II. पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्) (2x2=4)
 - (i) देशदेशान्तरेभ्यः के आगच्छन्ति ?
 - (ii) विदुषः नाम किम् ?
 - (iii) विद्वान् (त्रिपाठिवर्यः) कस्य आराधनायां तल्लीनः भवति ?
- III. अस्य अनुच्छेदस्य कृते समुचितं शीर्षकं लिखत - (1x1=1)
- IV. भाषिककार्यम् - (केवलं प्रश्नत्रयम्) (1x3=3)
 - (i) 'प्राचीनः कूपः' इति अनयोः पदयोः विशेषणपदं किम् ?
(क) प्राचीनः (ख) कूपः (ग) ग्रामः (घ) गुरुकुलम्
 - (ii) 'कुपिताम्' इति पदस्य विलोमपदं गद्यांशे किम् ?
(क) पिपासां (ख) पारङ्गतः (ग) शान्ताम् (घ) वस्तुतः
 - (iii) "संस्कृतगङ्गा रात्रिन्दिवं प्रवहमाना अस्ति" अत्र कर्तृपदं किम् ?
(क) रात्रिन्दिवम् (ख) भगवतः (ग) संस्कृतगङ्गा (घ) विद्वान्
 - (iv) 'ज्ञानी' पदस्य किं पर्यायपदं गद्यांशे आगतम् ?
(क) मूर्खः (ख) विद्वान् (ग) तल्लीनः (घ) धारणा

'ख' खण्डः रचनात्मकं कार्यम् - 15 अङ्काः

2. भवान् प्रसूनः छात्रावासे वसति । शीतावकाशे भवतः विद्यालये संस्कृतसम्भाषणाशिविरं प्रचलिष्यति । अतः भवान् गृहं न गमिष्यति, इति सूचयन् पितरं प्रति लिखितं पत्रं मञ्जूषापदसहायतया उत्तरपुस्तिकायां पुनः लिखत - (½x10=5)
डी.पी.एस. छात्रावासः
(i) _____

पूज्याः पितृचरणाः!

(ii) _____

अत्र कुशलं (iii) _____ । इदानीं मम (iv) _____ परीक्षा प्रचलति । परीक्षायाः अनन्तरं मम विद्यालये शीतावकाशे

(v) _____ प्रचलिष्यति । अतः अहम् अवकाशदिनेषु (vi) _____ आगन्तुं न शक्नोमि । भवतां दर्शनेन अहं वञ्चितः

(vii) _____ इति खेदः, तथापि शिविरेण मम (viii) _____ भविष्यति । अत्र नास्ति सन्देहः । (xi) _____ मम वन्दनानि ।

भवदीयः पुत्रः

(x) _____

Contd...2

मञ्जूषापदानि - प्रणामाः , पूर्वपरिषदीया , ज्ञावनर्धनम् , प्रसूनः , भवामि ,
गृहम् , तत्रास्तु , भिलाईतः , संस्कृतसम्भाषणशिविरम् , मातृचरणयोः

3. मञ्जूषायां प्रदत्तशब्दानां सहायतया चित्रं दृष्ट्वा पञ्चवाक्यानि संस्कृतेन लिखत - (1x5=5)

मञ्जूषा - उद्यानम् , बालः , वृक्षः , पादपः , प्रातः , खगः , पुष्पाणि , कन्दुकम् ,
क्रीडा , भ्रमणम् , सूर्यः , क्रीडति , भ्रमतः , कुरुतः



अथवा

“वृक्षाणां महत्त्वम्” इति विषयम् अधिकृत्य मञ्जूषापदसहायतया पञ्चवाक्यानि संस्कृतभाषायां लिखत -

मञ्जूषा - फलानि , मित्राणि , औषधं , रक्षकाः , प्राणवायुं , छाया ,
काष्ठानि , पर्यावरणस्य , प्रकृतेः , यच्छन्ति , शोभा

4. अधोलिखितहिन्दीवाक्यानि संस्कृते अनुवादं कुरुत - (केवलं पञ्चवाक्यानि) (1x5=5)

- संस्कृत प्राचीन भाषा है।
- तुम सब पुस्तक पढ़ो।
- लता नाचती है।
- राम और श्याम जाएँगे।
- भारत हमारा देश है।
- बालक विद्यालय से आता है।
- हम लोगों को परिश्रम करना चाहिए।

‘ग’ खण्डः अनुप्रयुक्तं व्याकरणम् - 25 अङ्काः

5. यथापेक्षितं सन्धिं विच्छेदं वा कुरुत - (केवलं प्रश्नचतुष्टयम्) (1x4=4)

- पशुनापि उदीरितः+अर्थः गृह्यते।
- अन्योन्यसहयोगेन लाभस्तेषां प्रजायते।
- सिंहमहोदयेन सम्यक् + उक्तम्।
- जगन्नाथः सर्वान् रक्षति।
- महानगरमध्ये चलत् + अनिशं कालायसचक्रम्।

6. अधोलिखितवाक्येषु रेखाङ्कितपदानां समासं विग्रहं वा प्रदत्तविकल्पेभ्यः चित्वा लिखत - (केवलं प्रश्नचतुष्टयम्) (1x4=4)

- प्रपश्यामि ग्रामान्ते निर्झर-नदी-पयः पूरम्।
(क) ग्रामाय अन्ते (ख) ग्रामस्य अन्ते (ग) अन्ते ग्रामः (घ) अन्तस्य ग्रामे
- अहं स्थिता प्रजा यस्य सः इव तिष्ठामि।
(क) स्थितप्रज्ञः (ख) प्रज्ञास्थितः (ग) प्रज्ञायास्थित (घ) प्रज्ञा स्थित
- यथासमयं सर्वेषां महत्त्वं विद्यते।
(क) समयं यथा (ख) समयं समयं यथा (ग) समयम् अनतिक्रम्य (घ) अनतिक्रम्या समये
- सभायां लवः च कुशः च प्रविशतः।
(क) लवकुशौ (ख) कुशलवाः (ग) लोकेशः (घ) लवं कुशं प्रति
- वयं गृहं गृहं प्रति संस्कृतं प्रसारयामः।
(क) प्रतिगृहम् (ख) गृहस्यप्रति (ग) गृहम्प्रति (घ) गृहस्य समीपे

7. अधोलिखितवाक्येषु रेखाङ्कितपदानां प्रकृति-प्रत्ययौ संयोज्य विभज्य वा उचितम् उत्तरं चित्वा लिखत - (केवलं प्रश्नचतुष्टयम्) (1x4=4)
- (i) बुद्धिमान् महतो भयात् मुच्यते।
 (क) बुद्धि + मतुप् (ख) बद्ध + मत् (ग) बुद्धिम् + मतुप् (घ) बुद्धि + क्तवत्
- (ii) जननी तुल्यवत्सल + टाप् भवति।
 (क) तुल्यवत्सलता (ख) तुल्यवत्सला (ग) तुल्यवत्सलाप् (घ) तुल्यवत्सलान्
- (iii) किं ते महत्त्वम् ?
 (क) महत् + टाप् (ख) महत् + त्वाम् (ग) महत् + त्व (घ) महान् + मतुप्
- (iv) परोपकारः सर्वेषां प्राथमिकः कर्तव्यः।
 (क) प्रथम + ठक् (ख) प्राथम + इक् (ग) प्रातः + ठक् (घ) प्रथमायाः + ठक्
- (v) भवत् + डीप् तु सर्वथा सम्यक् कथयति।
 (क) भवता (ख) भवन्ति (ग) भवती (घ) भवत
8. वाच्यानुसारम् उचितपदैः रिक्तस्थानानि पूरयित्वा अधोलिखितानि वाक्यानि पुनः लिखत - (केवलं प्रश्नत्रयम्) (1x3=3)
- (i) मया फलानि।
 (क) खाद्यते (ख) खाद्यन्ते (ग) खादसि (घ) खादतः
- (ii) चित्राणि पश्यन्ति।
 (क) छात्राः (ख) छात्रः (ग) छात्रैः (घ) छात्रेण
- (iii) अस्माभिः क्रियन्ते।
 (क) गृहकार्यम् (ख) गृहकार्ये (ग) गृहकार्याणि (घ) गृहकार्योः
- (iv) ईश्वरेण रक्ष्यामहे।
 (क) अहम् (ख) वयम् (ग) त्वम् (घ) यूयम्
9. समयवाचकपदैः अधोलिखितदिनचर्या पूरयत - (केवलं प्रश्नचतुष्टयम्) (1x4=4)
- (i) बालकः 5:00 वादने उत्तिष्ठति।
 (ii) सः 6:15 वादने विद्यालयं गच्छति।
 (iii) 9:45 वादने मध्यावकाशः भवति।
 (iv) बालकः सायं 4:30 वादने क्रीडनाय गच्छति।
 (v) पुनः बालकः सायं 7:15 वादने पठनाय उपविशति।
10. मञ्जूषायां प्रदत्तैः उचितैः अव्ययपदैः अधोलिखितवाक्यानि पूरयत - (केवलं प्रश्नत्रयम्) (1x3=3)
- मञ्जूषा - श्वः , शनैः , अद्य , उच्चैः
- (i) आकाशे मेघाः गर्जन्ति।
 (ii) अहं रायपुरं गमिष्यामि।
 (iii) वृद्धजनः चलति।
 (iv) संस्कृतपरीक्षा अस्ति।
11. अधोलिखितवाक्येषु रेखाङ्कित-अशुद्धपदाय उचितपदं विकल्पेभ्य चित्वा वाक्यानि पुनः लिखत - (केवलं प्रश्नत्रयम्) (1x3=3)
- (i) युवां किमर्थं हससि ?
 (क) हसतः (ख) हसथ (ग) हसथः (घ) हसावः
- (ii) ताः भोजनं पचति।
 (क) तौ (ख) सा (ग) अहम् (घ) ते
- (iii) रामः ह्यः विद्यालयं न आगच्छः।
 (क) आगच्छत् (ख) आगच्छत (ग) आगमिष्यति (घ) अगच्छतम्
- (iv) क्रीडाक्षेत्रे त्रयः बालिकाः क्रीडन्ति।
 (क) त्रयाः (ख) तिस्रः (ग) त्रीणि (घ) त्रिषु
- ‘घ’ खण्डः पठितावबोधनम् - 30 अङ्काः**
12. अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नान् उत्तरत - (5)
- विचित्रा दैवगतिः। तस्यामेव रात्रौ तस्मिन् गृहे कश्चन् चौरः गृहाभ्यन्तरं प्रविष्टः। तत्र निहितामेकां मञ्जूषाम् आदाय पलायितः। चौरस्य पादध्वनिना प्रबुद्धोऽतिथिः चौरशङ्कया तमन्वधावत् अगृहणाच्च, परं विचित्रमघटत। चौरः एव उच्चैः क्रोशितुमारभत “चौरोऽयं चौरोऽयम्” इति। तस्य तारस्वरेण प्रबुद्धाः ग्रामवासिनः स्वगृहाद् निष्क्रम्य तत्रागच्छन् वराकमतिथिमेव चौरं मत्वाऽभर्त्सयन्। यद्यपि ग्रामस्य आरक्षी एव चौर आसीत्। तत्क्षणमेव रक्षापुरुषः तम् अतिथिं चौरोऽयम् इति प्रख्याप्य कारागृहे प्राक्षिपत्।

- (I) एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्) (½ x2=1)
 (i) चौरः कुत्र प्रविष्टः ?
 (ii) अतिथिः केन प्रबुद्धः ?
 (iii) दैवगतिः कीदृशी भवति ?
- (II) पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्) (1x2=2)
 (i) रक्षापुरुषः तम् अतिथिं कुत्र प्राक्षिपत् ?
 (ii) चौरः किम् कृत्वा पलायितः ?
 (iii) ग्रामवासिनः किम् अकुर्वन् ?
- (III) भाषिककार्यम् - (केवलं प्रश्नद्वयम्) (1x2=2)
 (i) "प्रबुद्धाः ग्रामवासिनः" अत्र विशेष्यपदं किम् ?
 (ii) "प्राक्षिपत्" क्रियायाः कर्तृपदं (कर्त्ता) गद्यांशे किम् ?
 (iii) "दिने" इति पदस्य विलोमपदं गद्यांशे किम् ?
13. अधोलिखितं श्लोकं पठित्वा प्रदत्तप्रश्नान् उत्तरत - (5)
 मृगाः मृगैः सङ्गमनुव्रजन्ति,
 गावश्च गोभिः तुरगास्तुरङ्गैः।
 मूर्खाश्च मूर्खैः सुधियः सुधीभिः
 समान-शील-व्यसनेषु सख्यम् ॥
- (I) एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्) (½ x2=1)
 (i) मृगाः कैः सङ्गमनुव्रजन्ति ?
 (ii) केः सुधीभिः सह भवन्ति ?
 (iii) के गोभिः सङ्गमनुव्रजन्ति ?
- (II) पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्) (1x2=2)
 (i) केषु सख्यम् भवति ?
 (ii) के कैः सङ्गमनुव्रजन्ति ?
 (iii) तुरगैः सह के भवन्ति ?
- (III) भाषिककार्यम् - (केवलं प्रश्नद्वयम्) (1x2=2)
 (i) "पण्डिताः" इति पदस्य विलोमपदं श्लोके किम् ?
 (ii) "मित्रता" इति पदस्य पर्यायपदं श्लोके किम् आगतम् ?
 (iii) अनुव्रजन्ति क्रियायाः कर्तृपदं (कर्त्ता) श्लोके किम् ?
14. अधोलिखितं नाट्यांशं पठित्वा प्रदत्तप्रश्नान् उत्तरत - (5)
 (गजः तं वृक्षमेव स्वशुण्डेन आलोडयितुमिच्छति परं वानरस्तु कूर्दित्वा अन्यं वृक्षमारोहति। एवं गजं वृक्षात् वृक्षं प्रति धावन्तं दृष्ट्वा सिंहः अपि हसति वदति च।)
 सिंहः - भोः गज! मामप्येवमेवातुदन् एते वानराः।
 वानरः - एतस्मादेव तु कथयामि यदहमेव योग्यः वनराजपदाय येन विशालकायं पराक्रमिणं, भयंकरं चापि सिंहं गजं वा पराजेतुं समर्था अस्माकं जातिः। अतः वन्यजन्तूनां रक्षायै वयमेव क्षमाः।
- (I) एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्) (½ x2=1)
 (i) कः हसति ?
 (ii) कः कूर्दित्वा अन्यं वृक्षं आरोहति ?
 (iii) गजः वृक्षं केन आलोडयितुम् इच्छति ?
- (II) पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्) (1x2=1)
 (i) सिंहः किम् दृष्ट्वा हसति ?
 (ii) गजः किम् इच्छति ?
 (iii) कः वृक्षात् वृक्षं प्रति धावति ?

(III) भाषिककार्यम् - (केवलं प्रश्नद्वयम्)

(1x2=2)

- (i) "विजेतुं" पदस्य किं विलोमपदं गद्यांशे आगतम् ?
- (ii) "कपिः" पदस्य किं पर्यायपदं गद्यांशे आगतम् ?
- (iii) "हसति" क्रियायाः कर्तृपदं (कर्ता) गद्यांशे किम् ?

15. रेखाङ्कितपदानि आधृत्य प्रश्ननिर्माणं कुरुत - (केवलं प्रश्नचतुष्टयम्)

(1x4=4)

- (i) मानवाय जीवनं कामये ।
- (ii) बुद्धिमती चपेटया प्रहतवती ।
- (iii) सुराधिपः ताम् अपृच्छत् ।
- (iv) धैर्यवान् लोके परिभवं न प्राप्नोति ।
- (v) मालाकारः तोयैः तुरोः पुष्टिं करोति ।

16. मञ्जूषातः समुचितपदानि चित्वा अधोलिखितस्य श्लोकस्य अन्वयं पूरयित्वा पुनः लिखत -

(1x4=4)

य इच्छत्यात्मनः श्रेयः प्रभूतानि सुखानि च ।
न कुर्यादहितं कर्म स परेभ्यः कदापि च ॥

अन्वयः -

यः आत्मनः (i) प्रभूतानि (ii) च इच्छति । सः परेभ्यः (iii) कर्म
(iv) न कुर्यात् ।

मञ्जूषा - सुखानि , कदापि , अहितं , श्रेयः

अथवा

मञ्जूषासहायतया श्लोकस्य भावार्थं पूरयित्वा पुनः लिखत -

(1x4=4)

आचारः प्रथमो धर्मः इत्येतद् विदुषां वचः ।
तस्माद् रक्षेत् सदाचारं प्राणेभ्योऽपि विशेषतः ॥

भावार्थः - सदाचारः जनानां (i) धर्मः अस्ति, इति (ii) कथयन्ति । अतः एव जनैः
(iii) रक्षा प्राणेभ्यः अपि (i) करणीया ।

मञ्जूषा - विद्वांसः , विशेषतः , प्रथमः , सदाचारस्य

17. अधोलिखितवाक्यानि घटनाक्रमानुसारं पुनः लिखत -

(½ x8=4)

- (i) तत्र राजसिंहः नाम राजपुत्रः अवसत् ।
- (ii) देउलाख्यो नाम ग्रामः अस्ति ।
- (iii) मार्गे गहनवने सा एकं व्याघ्रं दृष्टवती ।
- (iv) तस्य भार्या पुत्रद्वयोपेता पितुर्गृहं प्रति चलिता ।
- (v) सा पुत्रौ अवदत् - कथं व्याघ्रभक्षणाय कलहं कुरुथः ।
- (vi) धूर्तः शृगालः हसन् अवदत् - भवान् कुतः भयात् पलायितः ।
- (vii) व्याघ्रमारी सा तूर्णं धाविता ।
- (viii) अतः उच्यते - सर्वदा सर्वकार्येषु बुद्धिः बलवती ।

18. रेखाङ्कितपदानां प्रसङ्गानुसारं उचितम् अर्थं चित्वा लिखत - (केवलं प्रश्नत्रयम्)

(1x3=3)

- (i) नवमालिका रसालम् मिलिता रुचिरं संगमनम् ।
(क) कुसुमम् (ख) आम्रम् (ग) समीरम् (घ) रसम्
- (ii) भगवान् सहस्रदीधितिः ।
(क) सूर्यः (ख) चन्द्रः (ग) लवः (घ) कुशः
- (iii) निजगले बद्ध्वा चल सत्वरम् ।
(क) विलम्बः (ख) सदा (ग) शीघ्रम् (घ) शनैः
- (iv) चातकः पुरन्दरं याचते ।
(क) इन्द्रम् (ख) खगम् (ग) आकाशम् (घ) पृथ्वी



GENERAL INSTRUCTION:

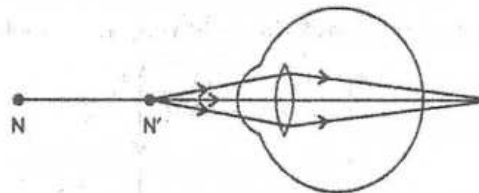
- 1) The question paper consists of three sections A, B and C.
- 2) You have to solve all the sections.
- 3) All the questions are compulsory. However internal choices have been given in some questions. You have to solve any one of them.
- 4) For Assertion and Reasoning questions following are the options.
 - a) Both A and R are true and R is the correct explanation of A.
 - b) Both A and R are true but R is not the correct explanation of A.
 - c) A is true but R is false.
 - d) A is false but R is true.

SECTION A : PHYSICS (25 Marks)

- Q.01** A battery connected to a resistor supplied a current of 4A. If another resistor of equal resistance is connected in parallel to the first resistor, then the current supplied by the battery will be- (1)
 (a) 12A (b) 1A (c) 2A (d) 8A
- Q.02** A piece of wire of resistance R is cut into 5 equal parts. These parts are then connected in parallel. If the equivalent resistance of this combination is R', then the ratio $\frac{R}{R'}$ is- (1)
 (a) $\frac{1}{50}$ (b) 25 (c) 5 (d) $\frac{1}{5}$
- Q.03** At the time of short circuit, the current in the circuit - (1)
 (a) Reduces substantially. (b) does not changes.
 (c) Increases heavily. (d) varies continuously.
- Q.04** The magnetic field inside a long straight solenoid carrying current: (1)
 (a) Is zero (b) Decreases as we move towards its end
 (c) Increases as we move towards its end (d) Is the same at all points

For answering this question refer instruction :

- Q.05** **ASSERTION :** On reversing the direction of flow of current through a straight conductor, the direction of a magnetic field around the conductor is reversed.
REASON : The direction of magnetic field around a conductor can be given in accordance with left hand thumb rule. (1)
- Q.06** Study the diagram given below and answer the questions that follow it: (2)



- (a) Name the defect of vision represented in this case? Give reason for your answer.
- (b) What could be the two causes of this defect?

OR

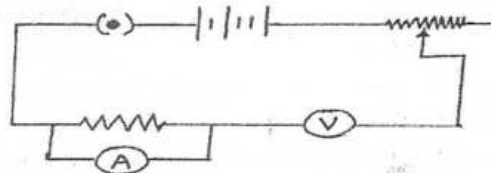
State the cause of dispersion of white light by a glass prism. Explain the formation of rainbow in the sky. Draw diagram also for formation of rainbow.

- Q.07** A concave mirror produces three times magnified real image of an object placed at 10cm in front of it. Find the position of image and focal length of the mirror. Draw ray diagram to show the image formation. (3)
- Q.08** Define: (3)
 a) Power of a lens.
 b) Principal axis of a convex lens.
 c) Aperture of a concave mirror.
- Q.09** Draw magnetic field pattern across a current carrying straight conductor. Mark the direction of current and direction of magnetic field. If we increase the current through the conductor what will be the effect on the magnetic field. Write the statement of the rule used to determine the direction of magnetic field across the straight conductor. (3)

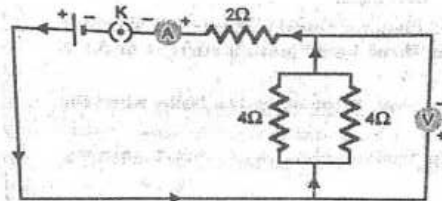
OR

What are magnetic field lines. Write any three properties of magnetic field lines. Draw the magnetic field pattern across a current carrying solenoid.

- Q.10 (a)** State Ohm's law and define 1 ohm. A child has drawn the electric circuit diagram to study Ohm's law as in figure. His teacher told him that the circuit diagram needs correction. Study the circuit diagram and redraw it after making all corrections.



- (b)** In the given circuit diagram find the total current and potential difference across $2\ \Omega$ resistance if the battery is of 10V . (3+2)



- Q.11** In this case-based question 2 or 3 short sub parts are given. Internal choice is provided in one of these sub parts.

The lenses form different types of images when an object is placed at different locations. When a ray is incident parallel to the principal axis, then after reflection, it passes through the focus or appears to come from the focus. When the ray goes through the optical centre of the lens, it passes without any deviation.

If the object is placed between the focus and the optical centre of the convex lens, an erect and magnified image is formed. As the object is brought closer to the convex lens from infinity to the focus, the image moves away from the convex lens from the focus to infinity. Also, the size of the image increases and the image is always real and inverted. A concave lens always gives a virtual, erect, and diminished image irrespective of the position of the object.

- (a) When the object is placed between F and $2F$, what is the position and nature of the image formed? (1)
 (b) When the object is placed at a distance of 20cm in front of a convex lens of focal length 10cm , then what will be the size of the image if the object is of 5cm ? (1)
 (c) At which location of the object in front of the concave lens, the image is formed between the focus and the optical centre? Show by ray diagram. (2)

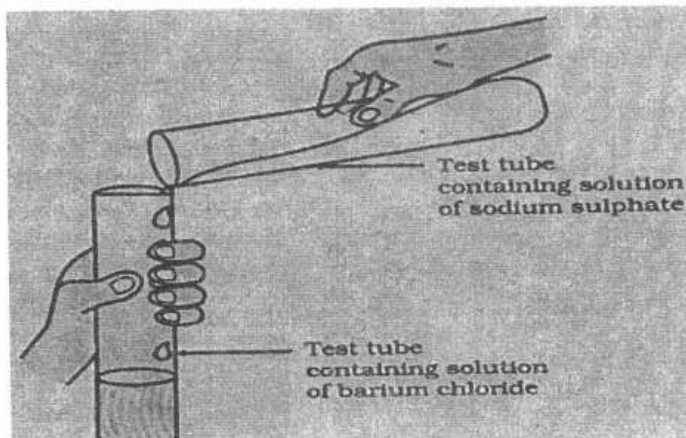
OR

- (c) Which lens can be used as a magnifying glass? Where will the object be placed in such a case? Draw a diagram to show it. (2)

SECTION B : CHEMISTRY (25 Marks)

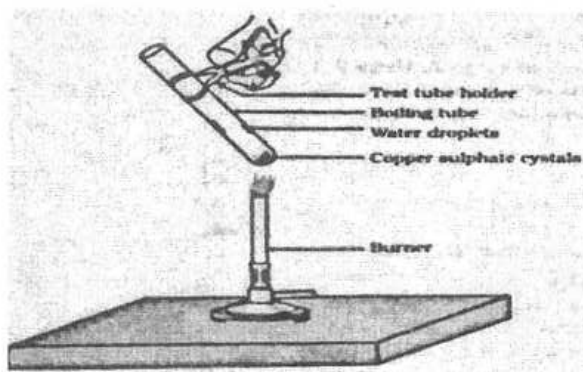
For answering this question refer instruction :

- Q.12** **Assertion :** Heat is required for the decomposition of Lead (II) nitrate. (1)
Reason : Decomposition reactions are endothermic.
- Q.13** $\text{Fe}_2\text{O}_3 + 2\text{Al} \rightarrow 2\text{Fe} + \text{Al}_2\text{O}_3$
 The above reaction is an example of
 (a) Combination reaction (b) Displacement reaction
 (c) Double displacement reaction (d) None of them (1)
- Q.14** Which is the reducing agent in the following reaction?
 $\text{MnO}_2 + 4\text{HCl} \rightarrow \text{MnCl}_2 + \text{Cl}_2 + 2\text{H}_2\text{O}$
 (a) MnO_2 (b) MnCl_2 (c) HCl (d) Cl_2 (1)
- Q.15** What is the colour of the precipitate formed when the following reaction takes place? (1)



- (a) Black (b) Blue (c) Yellow (d) White

- Q.16 Among the following reaction, which is used in black and white photography (1)
- (a) $2AgCl \rightarrow 2Ag + Cl_2$ (b) $C + O_2 \rightarrow CO_2$
- (c) $2Mg + O_2 \rightarrow 2MgO$ (d) $CaCO_3 \rightarrow CaO + CO_2$
- Q.17 What is the colour of copper sulphate crystals after heating? (1)



- (a) Blue (b) White (c) Black (d) Red
- Q.18 Which of the following contains oxalic acid? (1)
- (a) Sour milk (b) Orange (c) Tomato (d) Tamarind
- Q.19 Ethane, C_2H_6 has – (1)
- (a) 6 covalent bonds (b) 7 covalent bonds (c) 8 covalent bonds (d) 9 covalent bonds
- Q.20 Show the formation of Magnesium Oxide compound by the transfer of electrons [Mg = 24u, O = 16u] (2)

OR

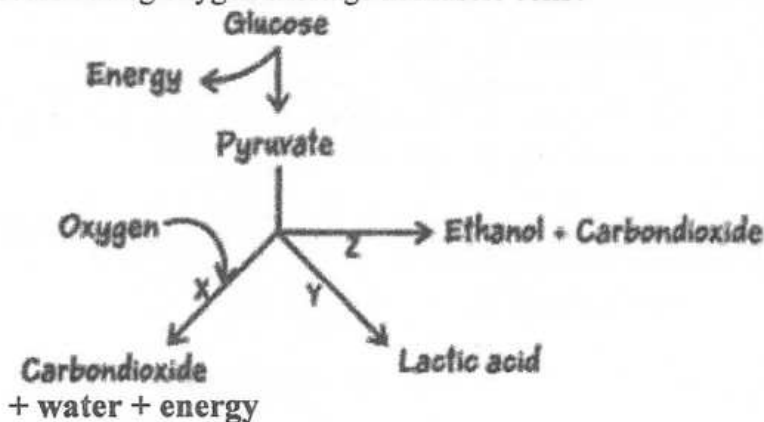
- (a) Name two metals which are found in nature in the free state.
- (b) Which chemical process is used for obtaining a metal from its oxide?
- Q.21 Write one equation each for decomposition reaction where energy is supplied in the form of heat, light and electricity. (3)
- Q.22 (a) What is the common name of the compound whose chemical formula is $CaOCl_2$? (3)
- (b) POP must be stored in a moisture proof container. Give reason with a chemical equation.
- Q.23 Read the following case and answer the questions give below : (Last question (c) has a choice) (4)
- Ionic compounds are solid and hard. These are brittle and break into pieces when pressure is applied. These compounds have high melting and boiling points. These are soluble in water insoluble in organic solvents such as kerosene petrol etc. They conduct electricity in the molten state and not in the solid state.
- (a) What are the ionic or electrovalent compounds? Define them.
- (b) Name the two ions (cation and anion) present in sodium oxide.
- (c) Why do ionic compounds conduct electricity only in the molten state but not in the solid state?

OR

- (c) Why do ionic compounds have high melting and boiling points?
- Q.24 (a) Draw and write the IUPAC names of all the possible structural isomers of Pentane, C_5H_{12} . (5)
- (b) Name any two properties of carbon which lead to the huge number of carbon compounds we see around us (explanation not needed).
- OR
- (a) What change will you observe, if you test soap with blue and red litmus paper? Explain the reason for the change.
- (b) Explain the term hydrogenation with a chemical equation. What is its industrial application?

SECTION C : BIOLOGY (30 Marks)

- Q.25 The length of small intestine in a deer is more as compared to the length of small intestine in a tiger. The reason for this is – (1)
- (a) Mode of intake of food. (b) Type of food consumed.
- (c) Presence or absence of villi in intestine (d) Presence or absence of digestive enzymes.
- Q.26 Which of the following occurs during oxygen shortage in muscle cells? (1)



- (a) Only Y (b) Only X (c) Both X and Y (d) Any of them – X, Y or Z

- Q.27 Which of the following creates a suction force which pulls water upwards from the roots of a tree to its leaves? (1)
(a) Gravitation (b) Respiration (c) Transpiration (d) Photosynthesis
- Q.28 In human males, the testes lie in the scrotum, because it helps in the – (1)
(a) Process of mating (b) Early transfer of gametes
(c) Formation of sperm (d) All the above
- Q.29 A zygote which has an X-chromosome inherited from the father will develop into a (1)
(a) a girl (b) a boy
(c) either boy or girl (d) only x chromosome involved in sex determination

For answering question no. 30 & 31 refer instruction :

- Q.30 **Assertion :** The muscular walls of ventricles are thicker than Atrium.
Reason : This helps in preventing the backflow of blood. (1)
- Q.31 **Assertion :** Double fertilization is unique to angiosperms.
Reason : One of the male gametes fertilizes with the ovum. (1)
- Q.32 In heart of mammals and birds why is it necessary to separate oxygenated and deoxygenated blood? (2)
- Q.33 Explain the feedback mechanism of hormone regulation? Take the example of insulin to explain this phenomenon. (2)
- Q.34 What are the three parts of the hind brain? Which part of the hind brain controls the involuntary action like blood pressure and vomiting? (2)
- Q.35 What is meant by the term trophic level in a food chain? Which trophic level will frog belong to in a food chain of frog, grass, insect and snake? (2)
- Q.36 Formation of urine takes place in kidney. What is the basic unit of kidney? Which part of this basic unit- (3)
(a) Filters the blood.
(b) Reabsorb the glucose.

OR

Draw a diagram of excretory unit of human kidney and label the following-

- (a) Bowman's capsule (b) Glomerulus
(c) Renal artery (d) Collecting duct
- Q.37 (a) What is a food chain? Explain with help of an example from the aquatic ecosystem.
(b) In the given food chain, suppose the amount of energy at fourth trophic level is 5KJ, what will be energy available at producer level? (3)

Grass → Grasshopper → Frog → Snake

- Q.38 (a) Make a labelled diagram of human female reproductive system and write the functions of following- (5)
(a) ovary (b) fallopian tube (c) uterus

OR

- (a) How does the embryo gets its nutrition from mother's blood? Briefly explain the structure which helps in this process.
(b) What will happen when egg does not get fertilized in human female?
- Q.39 Mendel used a number of contrasting visible characters of garden peas-round/wrinkled seeds, tall/short plants, white/violet flowers and so on. He took pea plants with different characteristics – a tall plant and short plant, produced progeny from them, and calculated the percentages of tall or short progeny. (4)

On the basis of above paragraph answer the following questions –

- (a) What are the two contrasting traits of seed shape in Pea Plants?
(b) Why only one of the contrasting traits appear in F₁ generation?
(c) What will be F₁ Progeny if a round green seeded pea plant (homozygous) is crossed with wrinkled yellow seeded (homozygous) pea plant.

OR

- (c) What will be the ratio of round green seeded pea plant and wrinkled green seeded pea plants in F₂ generation during a dihybrid cross.

(Parental genotypes = RRyy x rrYY)



General Instructions:

- i. This Question paper is divided into three sections-Section A, B, and C.
- ii. All questions are compulsory.
- iii. **Section-A : HISTORY & CIVICS 40 Marks.**
- iv. **Section-B : GEOGRAPHY 20 Marks.**
- v. **Section-C : ECONOMICS 20 Marks.**
- vi. Very short answer type questions are of 2 marks each. Answer to each question should not exceed 40 words.
- vii. Short answer type questions are of 3 marks each. Answer to each question should not exceed 80 words.
- viii. Long answer type questions are of 5 marks each. Answer to each question should not exceed 120 words.
- ix. Case Based questions are of 4 marks each. Answer these as required.
- x. Map based questions are of 2 and 3 marks (History and Geography). Total 5 marks.
- xi. 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 have to be attempted.
- xii. In addition to this, separate instructions have been given wherever necessary.
- xiii. Attach the map work properly.

SECTION – A : HISTORY AND CIVICS - 40 MARKS

1. After becoming the Monarch of France in 1804, Napoleon Bonapart brought many administrative reforms. Identify the incorrect statement from the following options. (1)
(a) Abolished slavery (b) Abolished feudal system
(c) Removed guild restrictions in towns (d) Secured the right to property
2. Which of the following newspaper was started by Bal Gangadhar Tilak? (1)
(a) Hind Swaraj (b) Maratha (c) Sambad Kaumudi (d) Maratha
3. Look at the picture given below. Identify the name of the painter of this painting from the following options. (1)



- (a) Devendra Nath Tagore (b) Rabindra Nath Tagore
(c) Abanindra Nath Tagore (d) Raja Ravi Verma
 4. Arrange the following in chronological order: (1)
I. The French Revolution against Louis XVI
II. Marco Polo visited China
III. Print came to India
IV. Bible was translated into German by Martin Luthar
- OPTIONS:**
- (a) III, II, I & IV (b) I, II, III & IV
(c) IV, III, II & I (d) II, IV, III & I
5. Consider the following statements regarding power sharing arrangements in Sri Lanka and identify the incorrect one from the following: (1)
(a) Tamils were feeling alienated in Sri Lanka.
(b) Sri Lankan Tamils started movements and struggles and movements against the government.
(c) Sri Lanka was a British colony before it got independence in 1949.
(d) Sinhala established majoritarian rule in Sri Lanka in 1956.
 6. Which one of the following subjects comes under the State List in the constitution of India? (1)
(a) Education (b) Marriage (c) Police (d) Banking
 7. Which of the following statement is not true regarding the Balkan Crisis? (1)
(a) Balkan is a region in Europe.
(b) Balkan countries included Serbia, Lithuania, Greece Albania etc.
(c) Balkan Crisis led to the Second World War.
(d) The Balkan states were fiercely jealous of each other.

8. Which one among the following pairs is correctly matched? (1)

LIST I

- (a) Bhartiya Janata Party
- (b) Indian National Congress
- (c) Communist Party of India
- (d) Mizo National Front

LIST II

- (1) Inspired by the American Revolution
- (2) A centrist political party
- (3) Regional Party
- (4) NDA

9. There are two statements marked as Assertion (A) and Reason (R). Write your answer as per the codes provided below: (1)

Assertion (A): In China, elections are held after regular intervals

Reason (R): All registered and recognised political parties contest for coming to power

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

10. Which one of the following was chosen as the headquarters of the European Union? (1)
(a) Paris (b) Berlin (c) Manchester (d) None of the above

11. Cotton weavers in Colonial India faced some major problems when markets in India flooded with Manchester goods. Explain two of such problems. (2)

12. Briefly describe women's political representation in India. (2)

13. The First World War affected the socio – economic conditions in our country in many ways. Explain three such ways. (3)

OR

How did the Indian peasants – farmers and plantation workers relate themselves to the Civil Disobedience Movement by Mohandas Karamchand Gandhi? Describe. (3)

14. How does a democratic country differ from a none democratic country in the contemporary world. Explain. (3)

15. Describe the term *allegory* and explain three important attributes of Germania with their significance. (5)

OR

What do you understand by liberalism? Describe its views in the field of politics and economy. (5)

16. Describe the necessity of Political Parties in a modern democratic country. (5)

OR

Define *Political Party* and describe the importance of opposition parties in democracy. (5)

17. **Read the source given below and answer the question that follows:**

The example of indentured labour migration from India also illustrates the two-sided nature of the nineteenth-century world. It was a world of faster economic growth as well as great misery, higher incomes for some and poverty for others, technological advances in some areas and new forms of coercion in others. In the nineteenth century, hundreds of thousands of Indian and Chinese labourers went to work on plantations, in mines, and in road and railway construction projects around the world. In India, indentured labourers were hired under contracts which promised return travel to India after they had worked five years on their employer's plantation. Most Indian indentured workers came from the present-day regions of eastern Uttar Pradesh, Bihar, central India and the dry districts of Tamil Nadu. In the mid-nineteenth century these regions experienced many changes – cottage industries declined, land rents rose, lands were cleared for mines and plantations. All this affected the lives of the poor: they failed to pay their rents, became deeply indebted and were forced to migrate in search of work.

17(i) Who are called Indentured labourers. (1)

17(ii) What happened to Indian and Chinese indentured labourers in the 19th century? (1)

17(iii) Examine two changes in the mid-nineteenth century that eastern Uttar Pradesh, Bihar, central India and the dry districts of Tamil Nadu experienced. (2)

18. **Read the given extract and answer following questions.**

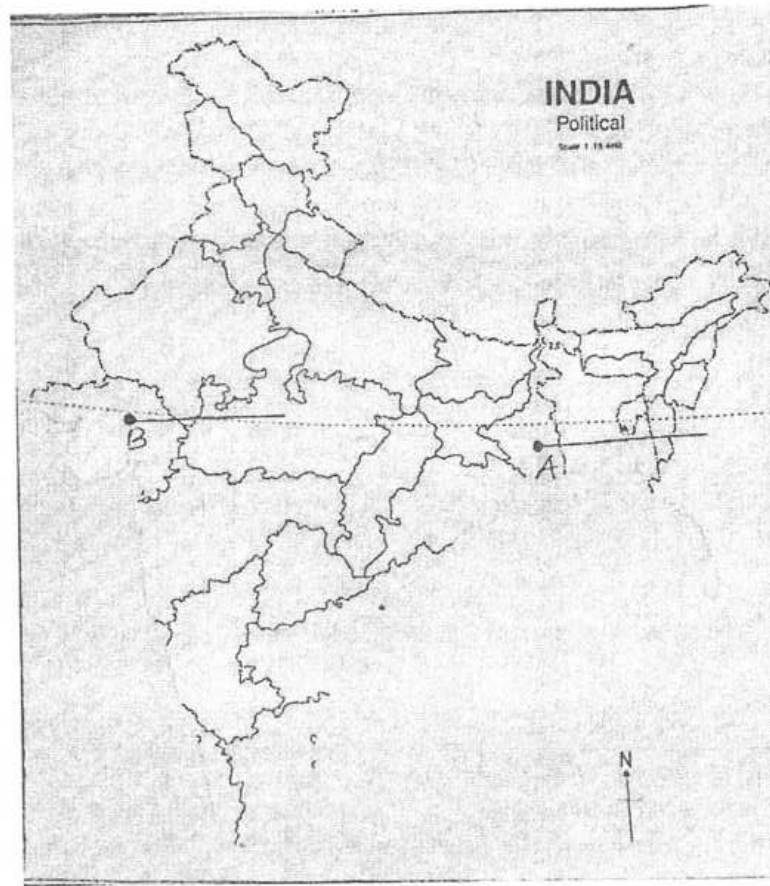
Between 1970 and 1993, they amended their constitution four times so as to work out an arrangement that would enable everyone to live together within the same country. The arrangement they worked out is different from any other country and is very innovative. Constitution prescribes that the number of Dutch and French-speaking ministers shall be equal in the central government. Some special laws require the support of majority of members from each linguistic group. Thus, no single community can make decisions unilaterally. Many powers of the central government have been given to state governments of the two regions of the country. The state governments are not subordinate to the Central Government. Brussels has a separate government in which both the communities have equal representation. The French speaking people accepted equal representation in Brussels because the Dutch-speaking community has accepted equal representation in the Central Government.

18(i) Why did people of Belgium amend their constitution between 1970 and 1993? (1)

18(ii) What is Brussels to Belgium? (1)

18(iii) The state governments are not subordinate to the Central Government. What does it mean to the Belgians? (2)

19. Two places A and B have been marked on the given outline map of India. Identify them and write their correct names on the lines drawn near them. (2)
- (a) Indian National Congress session at this place in September 1920
 (b) The place from where Gandhiji started the march to break the salt law.



SECTION – B : GEOGRAPHY - 20 MARKS

20. Identify the soil on the basis of the following information (1)
 (a) It is the result of intense leaching due to heavy rain.
 (b) It is mostly deep to very deep and acidic.
 (c) Found in the hilly areas of Karnataka, Kerala and Tamil Nadu.
21. Which of the following states has the largest area under permanent forests, constituting 75 percent of its total forest area? (1)
 (a) Odisha (b) Chhattisgarh (c) Assam (d) Madhya Pradesh
22. Which of the following is not correctly matched? (1)
 (a) Guls or kuls (i) Western Himalaya
 (b) Inundation channels (ii) Plains of Bengal
 (c) Johads (iii) Gujarat
 (d) Palar Pani (iv) Rainwater
23. Write any two features of plantation agriculture. (1+1)
 OR
 Write the geographical conditions of growth of Jute.
24. Why is it necessary to conserve mineral resources? Support your answer with three points. (1+1+1=3)
25. "Roadways still have an edge over railways in India." Justify the statement with five points. (1+1+1+1+1=5)
 OR
- (a) Write three merits of waterways. (3)
 (b) Name the inland riverine major sea port in India. (1)
 (c) Why is air travel preferred in the north eastern states of India? (1)

Case Based Questions (4 marks)

Read the source given below and answer the question that follows :

26. The economic strength of a country is measured by the development of manufacturing industries. Manufacturing industries not only help in modernising agriculture but is also a precondition for eradication of unemployment and poverty. Industrial locations are complex in nature. These are influenced by availability of raw material, labour, capital power, market and water. Industries can be classified on various basis such as on the basis of source of raw materials used, their main role, capital investment, ownership and on the bulk and weight of raw materials. Although industries contribute significantly to India's economic growth and development, the increase in pollution of land, water, air, noise and resulting degradation of environment that they have caused can not be overlooked.
- Air pollution is caused by the present of undesirable gases, air bone particulate materials and smoke.

Water pollution is caused by organic and inorganic wastes and effluents discharged into the rivers. Every litre of waste water discharged by our industries pollute eight times the quantity of fresh water. The challenge of sustainable development requires integration of economic development with environmental concerns.

- 26 (i) Name any two physical factors for location of any industry. (1/2 + 1/2 = 1)
 26 (ii) How do industries pollute the air? (1)
 26 (iii) "Manufacturing sector is considered the backbone of economic development." Justify the statement with two points. (1+1=2)

27. On the given map of India locate and label any three of the following with suitable symbols. (1x3=3)
 (a) Hirakud dam (b) Kandla Sea Port
 (c) Kalpakkam nuclear power station (d) Noida software technology park

SECTION – C : ECONOMY - 20 MARKS

28. Choose the incorrectly matched pair : (1)

LIST 1	LIST 2
(a) Per Capita Income	Average Income
(b) National Income	Total Income
(c) Body Mass Index	Average Weight of the Population
(d) Decent Standard of Living	Human Development Index

29. Ram weighs 98 kgs and his height is 165 cm. Find out his Body Mass Index (BMI) from following options.
 (a) 18.5 (b) 36.0 (c) 15.2 (d) 25.0 (1)
30. Match the following : (1)

LIST 1	LIST 2
(a) Goods used up in the production process	1. Economic Activities
(b) Goods which are ready to use	2. Intermediate Goods
(c) Activities which contribute to the flow of goods and services in an economy	3. Gross Domestic Product
(d) Value of all final goods and services produced in a country during a particular year	4. Final Goods

- (a) a – 2, b – 3, c – 4, d – 1 (b) a – 2, b – 4, c – 1, d – 3
 (c) a – 3, b – 1, c – 2, d – 4 (d) a – 4, b – 2, c – 3, d – 1

31. Fill in the Blank : (1)

SECTOR	CRITERIAL USED
Organised and Unorganised Sector	Nature of Employment Activities
Private and Public Sector	?

Codes :

- (a) Nature of Social Activities (b) Nature of Economic Activities
 (c) Nature of Ownership of Activities (d) None of the above

32. Muskan works in a private company. Sunita works as a daily wage earner. Both want a credit of ₹ 30,000. The bank is more likely to give credit to whom. (1)
 (a) Sunita, as she is more needy.
 (b) Muskan, as she has regular employment.
 (c) Neither Muskan nor Sunita will be provided credit from the bank.
 (d) Both Muskan and Sunita will be provided credit from the bank.
33. Which one of the following is not true regarding the World Trade Organisation (WTO) ? (1)
 (a) It allows free trade to all countries without any trade barriers.
 (b) Its aim is to liberalise international trade.
 (c) WTO rules have forced the developing countries to remove trade barriers.
 (d) It establishes rules regarding international trade.
34. The removal of trade barriers is known as (1)
 (a) Foreign Investment (b) Foreign Trade (c) Globalisation (d) Liberalisation
35. Differentiate between Organised and Unorganised sector of the economy giving two points of distinction. (2)
36. What are the various ways in which MNCs establish or control production in other countries? (3)
37. Discuss the various ways in which employment can be created in rural areas? (3)
38. Why cheap and affordable credit important for the country's development? Explain the reasons for banks and cooperative societies to increase their lending facilities in rural areas. (3+2=5)

OR

What are the disadvantages of informal sources of credit? Explain how Self Help Groups have been useful in overcoming the problem of credit in rural areas. (2+3=5)



General Instructions:

This question paper is divided into three sections namely A, B and C. Please read instructions in each section carefully.

Section A is of 24 marks. Each question is of 1 mark.

Section B is of 14 marks. Each question is of 2 marks.

Section C is of 12 marks. Each question is of 4 marks.

All questions of a particular section must be attempted in the correct order.

SECTION : A

1. Answer any 4 questions out given 6 questions.

(1x4=4)

- i. What is the shortcut key to cut a file.
a. Ctrl+C b. Ctrl+X c. Ctrl+V d. Ctrl+D
- ii. Meditation brings a sense of.....
a. Self-awareness b. Depression c. Anxiety d. Stress
- iii. are too focused on what others think and fail to focus on what matters to them.
a. Introspectors b. Seekers c. Pleasures d. All of them
- iv. Which of the following is not a component of Windows desktop?
a. Taskbar b. Icons c. Virus d. Start button
- v. Entrepreneurship is a good option for.....
a. A career choice b. Making quick money c. Doing charity d. Investment
- vi. Entrepreneurship has a crucial role in the of the society.
a. Evolution b. Planning c. Functioning d. None of the above

2. Answer any 5 questions out given 6 questions.

(1x5=5)

- i. Which of the following is NOT one of the three main domains of Artificial Intelligence?
a. Data b. Smart decision-making c. Computer Vision d. Natural Language Processing
- ii. 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
- iii. Which of the following data is available as soon as the data event takes place?
a. Big data b. Real time data c. Spatio-temporal data d. Time stamped data
- iv. Natural Language Processing (NLP) lies in which of the following fields?
a. Artificial Intelligence b. Computer Science c. Only (b) d. Both (a) and (b)
- v. Natural Language Processing (NLP) can be useful in which of the following areas?
a. Automatic Text Summarisation b. Virtual Assistants
c. Machine Translation d. All of the above
- vi. Select the correct category for confusion matrix in the scenario given below.
You predicted that India would win the cricket world cup, and it won.
a. TP b. TN c. FP d. FN

3. Answer any 5 questions out given 6 questions.

(1x5=5)

- i. In, we provide the AI model for the correct answers ahead of time.
a. Transfer learning b. Unsupervised learning
c. Reinforced learning d. Supervised learning
- ii. AI systems cannot data.
a. Sort b. Classify c. Understand d. Analyse
- iii. Which of the following technology is based on the adaption of how the human brain works?
a. Supercomputing b. Smart technology c. Super networks d. Neural networks
- iv. Machine Translation feature converts.....
a. One human language to another b. human language to machine language
c. any human language to English d. Machine language to human language
- v. 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
- vi. _____ is defined as the percentage of correct predictions out of all the observations.
a. Predictions b. Accuracy c. Reality d. F1 Score

4. Answer any 5 questions out given 6 questions. (1x5=5)

- i. is the subset of Machine Learning.
 - a. Deep Learning b. Artificial Learning c. Semi-Bio Learning d. Redundant Learning.
- ii. Which of the following technology is predominantly used by Amazon Alexa?
 - a. Image Recognition b. Speech Recognition c. Robotics d. Neural Stems
- iii. Which of the following is a machine learning algorithm that allows software agents and machines to automatically determine the ideal behaviour within a specific context to maximise its performance?
 - a. Reinforced learning b. Supervised learning c. Deep learning d. Enforced learning
- iv. Simplification of human language in order to be easily understood by computers is called?
 - a. Sentence Planning b. Text Normalisation c. Text Realisation d. None of the above
- v. 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.
- vi. Which of the following statements is true for the term Evaluation?
 - a. Helps in classifying the type and genre of a document.
 - b. It helps in predicting the topic for a corpus.
 - c. Helps in understanding the reliability of any AI model
 - d. Process to extract the important information out of a corpus.

5. Answer any 5 questions out given 6 questions. (1x5=5)

- i. Which of the following does not use environment perception?
 - a. Security systems b. Drone surveillance systems
 - c. Smart vehicles d. Smart medical databases
- ii. Which of the following is not one of the ethical concerns?
 - a. Job loss b. Decreasing inequalities c. Privacy concerns d. Negative adaption
- iii. With which of the following activity does the AI project cycle start?
 - a. Brainstorming b. Resource allocation c. Problem defining d. Goal Setting
- iv. Which of the following is used for finding the frequency of words in some given text sample?
 - a. Stemming b. Lemmatisation c. Bag of words d. None of the above
- v. 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
- vi. _____ is the measure of balance between the Precision and Recall.
 - a. Predictions b. Accuracy c. Reality d. F1 Score

SECTION : B

6. Answer any 3 questions out of following 5 questions. (2x3=6)

- i. What are the various factors that cause stress?
- ii. What are two characteristics of an independent person?
- iii. What is spam? How is it harmful?
- iv. Entrepreneurs are job creators, not job seekers.' Explain this statement with an example.
- v. What do you think are two most common myths about entrepreneurship? Explain why they are not true.

7. Answer any 4 questions out given 6 questions. (2X4=8)

- i. What are the different abilities generally associated with intelligence?
- ii. Write a short note on good AI policy.
- iii. Differentiate between Data Acquisition and Data Exploring.
- iv. Differentiate between Sentence Tokenisation and Word Tokenisation.
- v. Explain how sentiment analysis is used by companies and why.
- vi. Is high accuracy equivalent to good performance?

SECTION : C

8. Answer any 3 questions out given 5 questions. (4X3=12)

- i. Create a 4W Project Canvas for the following.
 - As unemployment increases, youth may get involved in crimes. Good education and employment opportunities are extremely important. Government needs to make sure to achieve this goal.
- ii. Explain domains of Artificial Intelligence.
- iii. You have been asked to design an AI based smart security system. What are the different ethical concerns that can arise out of such a system?
- iv. Differentiate between Stemming and Lemmatisation. Explain with the help of an example.
- v. Find out Accuracy, Precision, Recall and F1 Score for the following confusion matrix.

TP	35	FP	15
FN	9	TN	41