SET -(B)

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग
KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

प्री-बोर्ड परीक्षा- II: 2025-26

PRE-BOARD- II EXAMINATION 2025-26

SUBJECT: GEOGRAPHY (029) MM : 70
CLASS : XII TIME : 3:00 Hours

GENERAL INSTRUCTIONS:

1. There are 30 questions in all.
2. All questions are compulsory.
3. Question numbers 1 to 17 are multiple choice questions carrying 1 mark each.
4. Question number 18 and 19 are source based question of 3 marks .
5. Question numbers 20 to 23 are short answer questions of 3 marks each. Answer to each of these questions should not exceed 60 words.
6. Question numbers 24 to 28 are long answer questions of 5 marks . Answer to the questions should not exceed 150 words.
7. Question numbers 29 and 30 is a map question. Properly tie map in answer sheet

SECTION-A

1 *Garrisson Cantonment towns emerged for their importance to defence purpose. Which among these is a garrison cantonment town ?* 1

A) Mhow B) Jaipur
C) Bikaner D) Dwarka

2 Neeru—Meeru programme belongs to which State ? 1

A) Gujarat B) Rajasthan.
C) Punjab. D) Andhra Pradesh

3 As a policymaker, tasked with fostering behavioural changes in the community to shift from a prevailing attitude of consumption to one focused on conservation and smart water management, which of the following programs would you prioritize for implementation? 1

A. Arvary Pani Sansad B. Atal Bhujal Yojana
C. National Water Policy, 2012 D. Jal Kranti Abhiyan

4 Leather industry possesses the example of which of the following industry? 1

(A)Forest based industry (B)Chemical based industry
(C)Animal based industry (D)Mineral based industry

5 Which one of the following types of industries produces raw materials for other industries? 1

(a) Cottage Industries (b) Small-scale Industries

(c) Basic Industries (d) Footloose Industries

6 The journey time from London to Istanbul has reduced a lot as compared to sea route due to which of the following railway line? 1

(A) Trans-Siberian Railway (B) Orient Express

(C) The Union and Pacific Railway (D) None of the above

7 The first complete population Census was conducted in India in: 1

A)1981 B)1881

C)1857 D)1957

8 As per the definition of working population , how many days does a Marginal Worker works in a year. 1

A) less than 240 days in a year B) less than 200 days in a year

C) less than 365 days in a year D) less than 183 days in a year

9 Rural settlements in India can broadly be put into four types. Which of these is **not** a type among them. 1

A) Clustered, agglomerated or nucleated, B) Semi-clustered or fragmented,

C) Hamleted, D) megacity

10 As per evolution of towns, which of these is **not** a type among them ? 1

A) Ancient town B) Medieval town

C) Industrial town D) Modern town

11 Which person gave theory and stated that the number of people would increase faster than the food supply ? 1

A) F Ratzel B)Thomas malthus

C) George B. Cressey D) Ralph waldo emerson

12 Which of the following is not a pillar of Human development ? 1

A) Equity B) Sustainablity

C) Prosperity D) Empowerment

13 Which one of the following types of cultivation was developed by European Colonists ? 1

(a) Kolkoz (b) Viticulture

(c) Mixed farming (d) Plantation

14 NITI AYOG was formed on ? 1

(A) 1 January 2015 (B) 5 January 2016

(C) 15 January 2019 (D) 25 January 2015

15 The book "Population Bomb" was written by 1

(A) Janine Benyus (B) Ehrlich

(C) Meadows (D) Michael Baumgart

16 ITDP refers to which one of the following ? 1

(a) Integrated Tourism Development Programme (b) Integrated Travel Development Programme

(c) Integrated Tribal Development Programme (d) Integrated Transport Development Programme

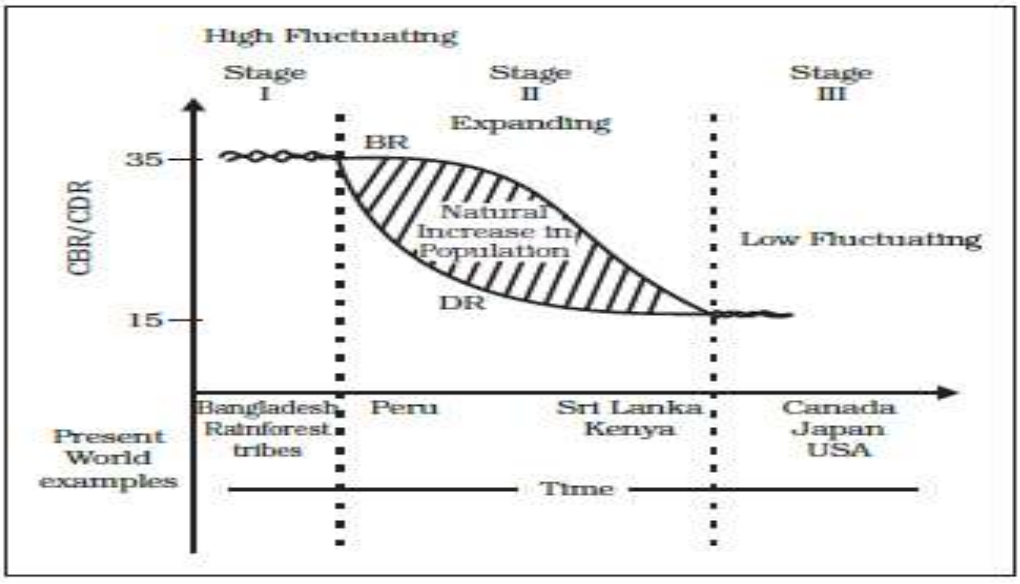
17 What does NHAI stand for? 1

(A) National Highway India (B) National Highway Authority of India

(C) National Highest Airport of India (D)None of these

SECTION B (Source based)

18 Study the graph given below and answer the question. 3X1= 3



Question :

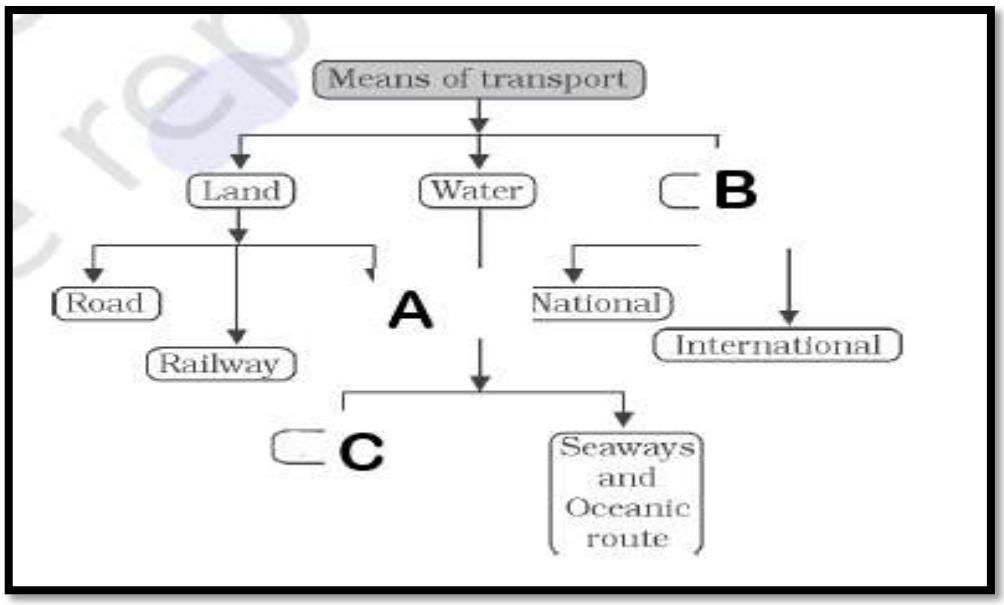
Based on the demographic transition graph provided answer the following questions

i) Write any one characteristic of stage I.

ii) Which stage shows sign of rapid population increase ?

iii) In Low fluctuating stage, what changes occur in CBR and CDR.

19 3X1=3



Based on the flow chart given above Write the names of items marked A,B and C

The following question is for **Visually Impaired Candidates** only in lieu of Question No.19

Q. 19 Write any three characteristics of Road transport.

SECTION C

20 Explain naturalisation of humans. 3

OR

Explain the concept of Neo determinism as explained by G. Taylor.

21 How are countries classified on the basis of human development index? 3

22 Ravi is analyzing employment data for different sectors of the Indian economy. He observes that a majority of India's workforce is still engaged in one particular sector that provides livelihood to a large section of rural people, despite contributing less to the GDP compared to other sectors. Based on this observation, explain why the agricultural sector has the largest share of Indian workers. 3

23 The composition of commodities in India's international trade has been undergoing a change over the years. Explain the changing shift in your own words. 3

SECTION D

24 Define the term "Extensive commercial grain cultivation". Explain the main characteristics of Extensive commercial grain cultivation. 1+4=5

25 Discuss the significance and growth of the service sector in modern economic development . 5

OR

Explain any two of the following in about 50 words each (2.5*2=5)

a) Retail trading service.

b)Digital divide

c) Mass media

26 Give a classification of ports on the basis of 5
a) cargo handled:
b) location

OR

Explain any five basis of international trade.

27 India has achieved remarkable progress in agricultural production since Independence, yet a large section of farmers continue to face persistent challenges.

As an economic analyst, assess the major physical constraints and institutional problems of Indian agriculture that hinder its productivity and sustainability. Support your answer with suitable examples.

OR

Despite being the backbone of India's economy, the agricultural sector has undergone significant transformation since Independence — from traditional subsistence farming to modern scientific cultivation.

As a student, evaluate the key phases, strategies, and outcomes of agricultural development in India, highlighting how technological and institutional changes have shaped its present scenario.

28 In many Indian cities, a large number of people live in slum areas due to rapid urbanization and shortage of affordable housing. These areas often lack proper sanitation, clean water, electricity, and healthcare facilities. Keeping this situation in mind, describe the major problems faced by people living in slums in India and explain how these problems affect their quality of life and urban development.

OR

Explain the problem of Urban waste disposal in India.

SECTION E

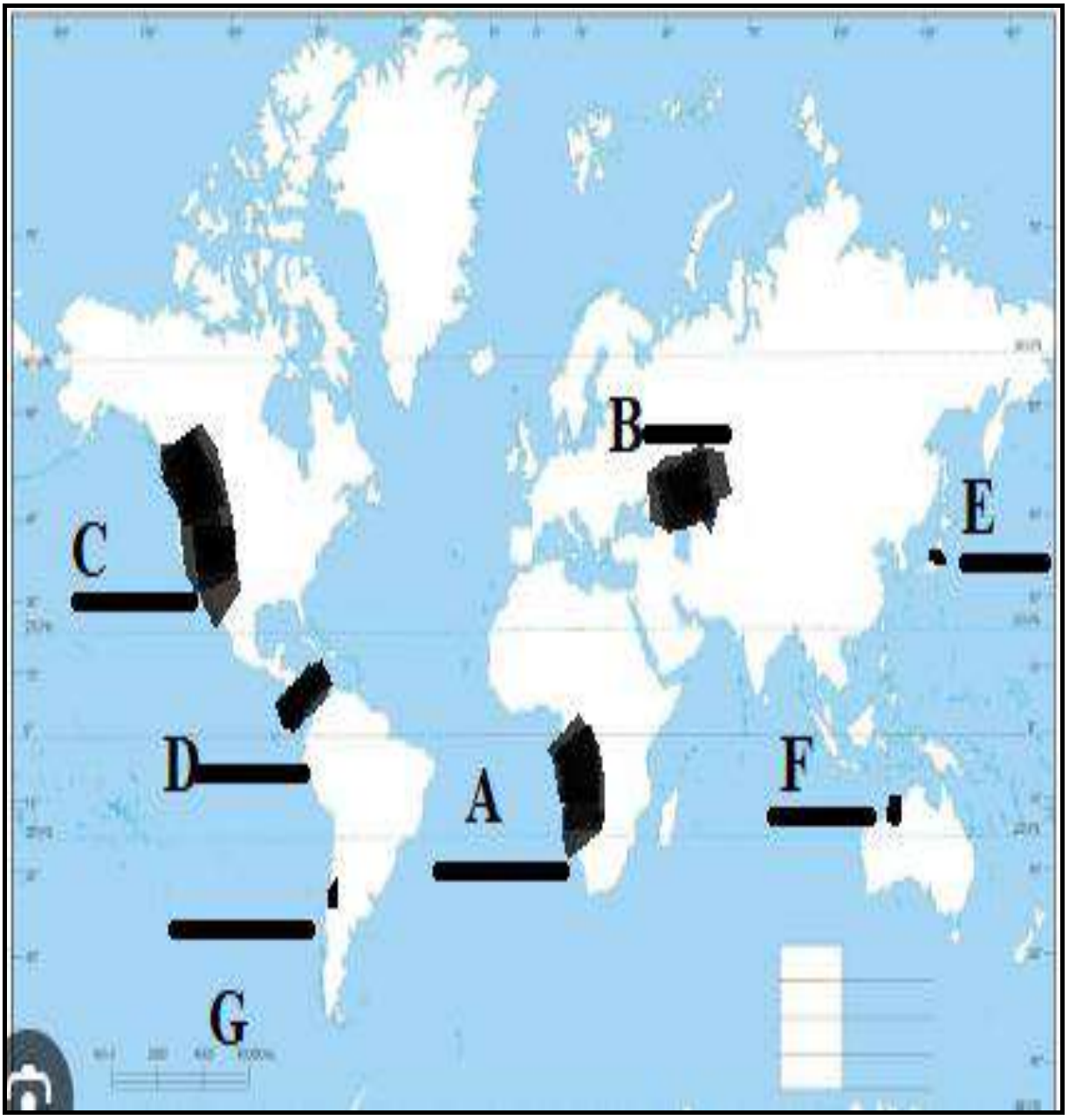
29 On the given political map of the World, seven geographical features have been marked as A, B, C, D, E, F and G. Identify any five with the help of the following information and write their correct names on the lines drawn near each feature. 5X1= 5

A. A region of nomadic herding
B. A region of Extensive Commercial grain cultivation
C. A region of Commercial livestock rearing
D. An important shipping canal between North and South America
E. An important airport in Asia
F. An important airport in Australia
G. An important Seaport in South America

30 Locate and label the following geographical features on the Political Outline map of India : (any five) 5X1= 5

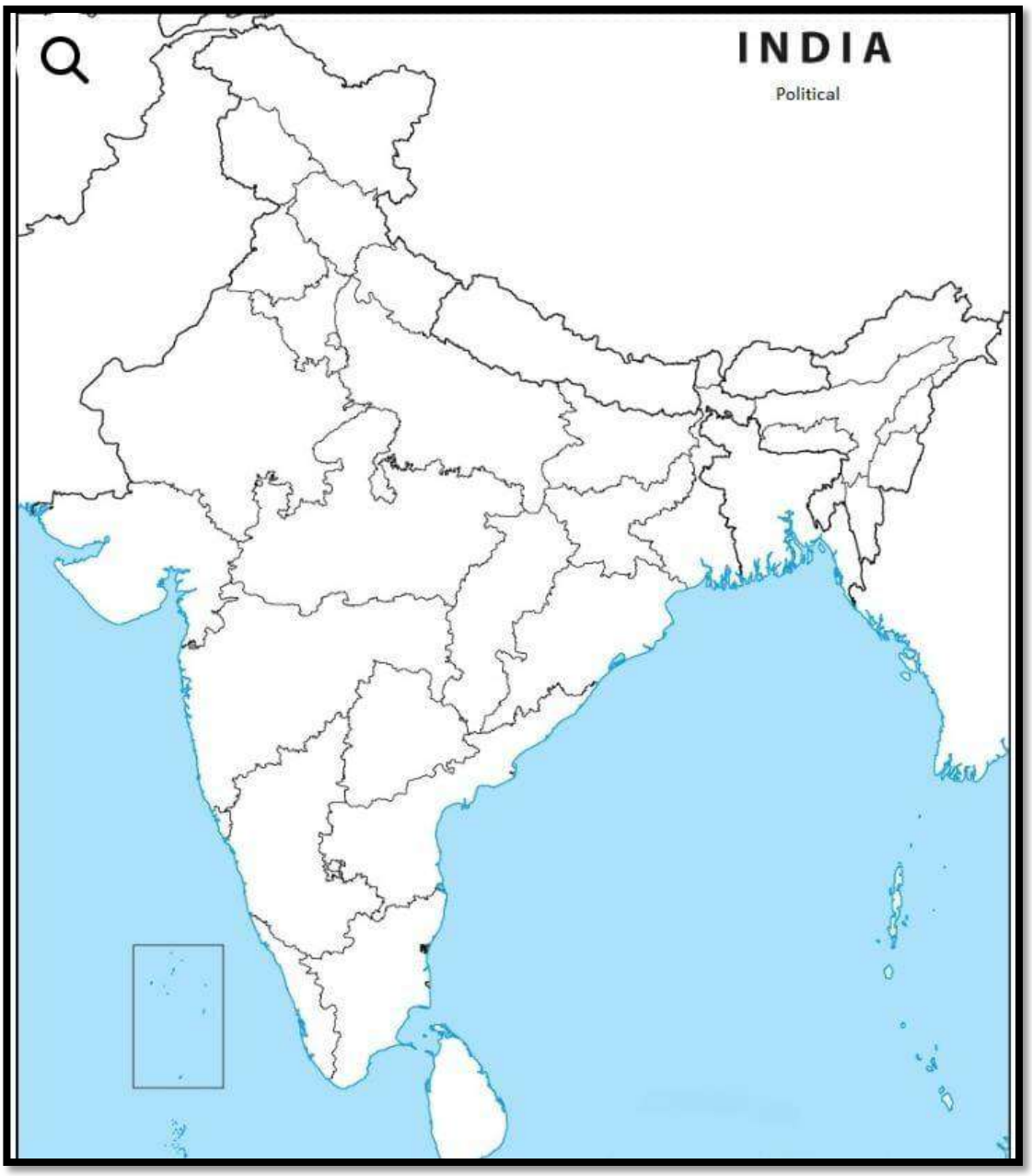
A. A state with Highest Population Density(2011)
B. A state with Lowest Population Density(2011)
C. A leading Wheat producing state.
D. An important iron ore mine in Odisha.
E. An international airport in Karnataka
F. An oil refinery in Gujarat
G. An important copper ore mine in Rajasthan.

29



5

30



5

Kendriya Vidyalaya Sangathan, Ahmedabad Region

Pre Board II Examination 2025-26 for Class XII

SUBJECT :HISTORY (027) SET B

TIME-3 HOURS **M.M=80**

General Instructions:

1. Question paper comprises five Sections – A, B, C, D and E. There are 34 questions in the question paper. All questions are compulsory.
2. Section A – Question 1 to 21 are MCQs of 1 mark each.
3. Section B – Question no. 22 to 27 are Short Answer Type Questions, carrying 3 marks each. Answer to each question should not exceed 60-80 words.
4. Section C - Question no 28 to 30 are Long Answer Type Questions, carrying 8 marks each. Answer to each question should not exceed 300-350 words
5. Section D – Question no.31 to 33 are Source based questions with three sub questions and are of 4 marks each
6. Section-E - Question no. 34 is Map based, carrying 5 marks that includes the identification and location of significant test items. Attach the map with the answer book.
7. There is no overall choice in the question paper. However, an internal choice has been provided in few questions. Only one of the choices in such questions have to be attempted.
8. In addition to this, separate instructions are given with each section and question, wherever necessary.

SECTION -A

1. Ashoka erected a piller at----------to mark that he had visited that place. 1
   A.Sarnath B.Sanchi. C.Bodh Gaya D. Lumbini

2. Who among the following had issued the first gold coins in the first century CE? 1
   A. The Yaudheyas B. The Parthians C. The Guptas D. The Kushanas

3. Who wrote the book Kitab-ul-Hind? 1
   A. Ibn Battuta B. Al- Biruni C. Francois Bernier D.Abdur Razzaq

4. Identify the Sikh guru who first compiled the Adi Granth, which later expanded into the Guru Granth Sahib. 1
   A. Guru Arjan Dev B. Guru Nanak Dev C. Guru Gobind Singh D. Guru Tegh Bahadur

5. Which one of the following was the main demand of the Khilafat movement? 1
   A. Dominion status for India B. Self-rule to India
   C.Restoration of Caliphate of Turkey D. Revival of orthodox culture of Islam

6. "Be lamps unto yourselves as all of you must work out your own liberation." Identify the essence of the words of Buddha from the options given below: 1
   A. One should connect to inner being
   B. One should live life of brahmacharya

C. One should focus and express feelings
D. One should spread religion everywhere.

7. The local merchants of the Vijayanagara Empire who participated in the trade of horses were called----------: 1

A. Gajapati B. Mahanayakas C. KudiraiChettis D.Narapati

8. There are two statements given below, marked as Assertion (A) and Reason (R). Read the statements and choose the correct option. 1

Assertion (A): The Revolt of 1857 in India was a spontaneous uprising with no clear leadership or organised strategy.

Reason (R): The participants came from diverse backgrounds and regions and lacked centralised coordination

A. A is true but R is false.
B. A is false but R is true.
C. Both A and R are true and R explains A.
D. Both A and R are true but R does not explain A.

9. The Harappan Civilisation had trade contacts with distant lands as well. In this respect, which of the following statements is CORRECT? 1

A.Trade contacts were established with the Mediterranean region through Suez Canal.
B.Metal currency was the primary medium of trade exchange with distant lands.
C.Texts from Mesopotamia mention Harappan links with modern day Bahrain.
D. Most Harappan crops were obtained through trade with distant lands.

10. Identify the name of the person from the information given below. 1

A.He was born at Tangier in one of the most respectable and educated family.
B. He considered experience gained through travel as a source of knowledge than books.
C. He had travelled to middle east and few trading ports on the coast of East Africa.
D. He wrote a book named Rihla .
A. Ibn Battuta
B. Francois Bernier
C. Al Biruni
D. Domingo Paes

11. Which among the following actions were adopted by followers of Gandhian Nationalism? 1

A. Encouraging people to learn English
B. Giving hate speech against the Indian minorities
C. Mobilising people to form an army against the British
D. Breaking unfair laws that the British had imposed on Indians

12. Who among the following was the best-known ruler of the Satavahana Dynasty? 1

A. YagnasriSatakarni B. SimukaSatakarni
C. Gotami-putraSiri- Satakarni D. VashisthaputraSatakarni

13. Which among the following was used in warfare by the Vijayanagar Empire during the 14th century? 1

A. Musket B. cannon C. sword D.stone

14. Which one of the following countries was the source of cotton after the out break of the American Civil War in 1861? 1

A. America B. Africa C. India D. Sri Lanka

15. Who among the following was the author of book 'The Story of Indian Archaeology'? 1

A. R E M Wheeler B. John Marshall C. S.N. Roy D. Rakhal Das Bannerjee

16. Which among the following is Correctly matched? 1

List I	List II
CENTRE	LEADER
A. Delhi	Nana Saheb
B. Kanpur	Kunwar Singh
C. Arrah	Bahadur Shah
D. Lucknow	Birjis Qadr

17. From which of the following regions Ahom rulers belonged to? 1

A. Delhi B. Orissa C. Ajmer D. Assam

18. Why was the task of defining minority rights in the Constituent Assembly difficult? 1

Choose the correct option from the following: -

A. Different groups had different demands regarding rights
B. British did not want to include it in the constitutional frame work.
C. Gandhiji opposed the idea of special rights for some sections.
D. Rights of people in Princely states were ambiguous.

19. Abu'lFazl was a court historian of which the following Mughal emperor? 1

A. Humayun B. Akbar C. Babur D.Jahangir

20. There are two statements given below, marked as Assertion (A) and Reason (R). 1

Read the statements and choose the correct option.

Assertion (A): Rich ryots and village headmen – jotedars and mandals – wanted the Zamindars to be in trouble.

Reason (R): The greater part of rural credit was supplied by the jotedars, not by the Zamindars who administered rural territory than owning land.

A. A is true but R is false.
B. A is false but R is true.
C. Both A and R are true and R explains A.
D. Both A and R are true but R does not explain A.

21. Identify the given image from the following options: 1

A. Sculpture of a Gupta king B. Sculpture of a Maurya king
C.Sculpture of a Kushana king D,.Sculpture of a Chola king

NOTE: The following question is for the visually impaired candidates in lieu of Question number 21.

Who among the following was the composer of Prayaga Prashasti?

A. Banbhatta B. Charak C. Harishena D. Surdas

SECTION -B

22 22 A. Describe any three features of the 'Great Bath' used in the Harappan settlements. OR 3
22 B. Describe any three features of Harrapan drainage system.

23. Explain the sources used by historians to reconstruct the history of the Mauryan Empire. 3

24. "The battle between the hoe and plough was a long one." Substantiate the statement with reference to the Santhal and Paharia's of Raj Mahal Hills during the 18th century. 3

25. Analyse the main features of Amara nayaka system which was introduced in the Vijayanagar Empire. 3

26. Give three reasons why Ibn Battuta's travel accounts differ greatly from Al Biruni's travel accounts. 3

27 27 A. "Rumours circulate only when they resonate, with the deep fears and suspicion of the people'. How was this statement true in the context of the Revolt of 1857? OR 3
27 B. "Through proclamations the rebels of 1857 completely rejected everything associated with British rule or firangi raj". Cite any three aspects to support this statement.

SECTION -C

28 28 A. "Brahmanical norms regarding marriage and occupation were not universally followed in ancient times." Give arguments in support of your answer. OR 8
28 B. List the non-Kshatriya Kings and write about their policies that challenged the Brahmanical ideas of society.

29 29 A. How did the village panchayat regulate the rural society in the Mughal period? Explain 8
OR
29 B. Examine the condition of zamindars in Mughal agrarian society.

30. 30 A. Examine the different kinds of sources from which the political career of Gandhiji and the history of the National movement could be reconstructed. OR 8
30 B. "The Quit India Movement genuinely a mass movement". Justify

SECTION D (Source Based Questions)

31 Read the source given below carefully and answer the questions that follow: 1+2+1 =4

The world beyond the palace.

Just as the Buddha's teachings were compiled by his followers, the teachings of Mahavira were also recorded by his disciples. These were often in the form of stories, which could appeal to ordinary people. Here is one example, from a Prakrit text known as the UttaradhyayanaSutta, describing how a queen named Kamalavati tried to persuade her husband to renounce the world: If the whole world and all its treasures were yours, you would not be satisfied, nor would all this be able to save you. When you die, O king and leave all things behind, dhamma alone, and nothing else, will save you. As a bird dislikes the cage, so do I dislike (the world). I shall live as a nun without offspring, without desire, without the love of gain, and without hatred …Those who have enjoyed pleasures and renounced them, move about like the wind, and go wherever they please, unchecked like birds in their flight … Leave your large kingdom … abandon what pleases the senses, be without attachment and property, then practise severe penance, being firm of energy
…

31.1 Identify the person who persuaded the king to renounce the world.

31.2 "Oh king, dhamma alone and nothing else will save you"-. What does the word "dhamma" signifies and whose teachings was followed by the disciple?

31.3 Under which context the following statement "unchecked like birds in their flight…" was told by the disciple of Mahavira?

32. Read the source given below carefully and answer the questions that follow: 1+2+1 =4

A demon?

This is an excerpt from a poem by Karaikkal Ammaiyar in which she describes herself:
The female Pey (demoness) with . . . bulging veins, protruding eyes, white teeth and shrunken stomach, red haired and jutting teeth lengthy shins extending till the ankles, shouts and wails while wandering in the forest. This is the forest of Alankatu, which is the home of our father (Shiva) who dances
… with his matted hair thrown own in all eight directions, and with cool limbs.

32.1. How beauty has been personified by Karaikal Ammaiyar?

32.2. "Bulging veins, protruding eyes, white teeth and shrunken stomach", "Shouts and wails". State the reason behind the poet's condition in the excerpt given

32.3 Examine the phrase "With his matted hair thrown in all eight directions "

33. Read the following source carefully and answer the questions that follow. 1+1+2 =4

What should be the qualities of a national language?

A few months before his death Mahatma Gandhi reiterated his views on the language question: This Hindustani should be neither Sanskritised Hindi nor Persianised Urdu but a happy combination of both. It should also freely admit words wherever necessary from the different regional languages and also assimilate words from foreign languages, provided that they can mix well and easily with our national language. Thus, our national language must develop into a rich and powerful instrument capable of expressing the whole gamut of human thought and feelings. To confine oneself to Hindi or Urdu would be a crime against intelligence and the spirit of patriotism.
(HARIJANSEVAK, 12 OCTOBER 1947)

33.1) Explain the term 'multicultural language '.

33.2) What were the characteristics of the national language, in context to the source

33.3) "The report of the Language Committee, promoted the spirit of patriotism" Give reasons.

SECTION -E (MAP BASED QUESTION)

34. 34.1 On the given political map of India, locate and label the following with appropriate symbols: 3+2=5

a. Kalibangan a Harappan site
b. Agra, a territory under Babur, Akbar, and Aurangzeb
c. Sanchi, a Buddhist site. OR Ajanta, a Buddhist site

34.2. On the same outline map, two places have been marked as A and B, which are the centers of Indian National movement.
Identify them and write their correct names on the lines drawn near them.
NOTE: The following question is for the visually impaired candidates in lieu of Question number 34.
Name any five centres of the freedom movement of India..

A
B

Kendriya Vidyalaya Sangathan, Ahmedabad Region

Pre Board II Examination 2025-26 for Class XII

SUBJECT :HISTORY (027) SET A

TIME-3 HOURS **M.M=80**

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13. Who wrote the book Kitab-ul-Hind? 1

C. Ibn Battuta (B) Al- Biruni (c) Francois Bernier (D. Abdur Razzaq

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21. Identify the given image from the following options: 1

A. Sculpture of a Gupta king B. Sculpture of a Maurya king
C.Sculpture of a Kushana king D. Sculpture of a Chola king

NOTE: The following question is for the visually impaired candidates in lieu of Question number 21.

Who among the following was the composer of Prayaga Prashasti?

A. Banbhatta B.Charak C. Harishena D. Surdas

SECTION -B

22 22 A. Describe any three features of the 'Great Bath' used in the Harappan settlements. 3

OR

22 B. Describe any three features of Harrapan drainage system.

23. Explain the sources used by historians to reconstruct the history of the Mauryan Empire. 3

24. "The battle between the hoe and plough was a long one." Substantiate the statement with reference to the Santhal and Paharia's of Raj Mahal Hills during the 18th century. 3

25. Analyse the main features of Amara nayaka system which was introduced in the Vijayanagar Empire. 3

26. Give three reasons why Ibn Battuta's travel accounts differ greatly from Al Biruni's travel accounts. 3

27 27 A. "Rumours circulate only when they resonate, with the deep fears and suspicion of the people'. How was this statement true in the context of the Revolt of 1857? 3

OR

27 B. "Through proclamations the rebels of 1857 completely rejected everything associated with British rule or firangi raj". Cite any three aspects to support this statement.

SECTION -C

28 28 A. "Brahmanical norms regarding marriage and occupation were not universally followed in ancient times." Give arguments in support of your answer. 8

OR

28 B. List the non-Kshatriya Kings and write about their policies that challenged the Brahmanical ideas of society.

29 29 A. How did the village panchayat regulate the rural society in the Mughal period? Explain 8

OR

29 B. Examine the condition of zamindars in Mughal agrarian society.

30. 30 A. Examine the different kinds of sources from which the political career of Gandhiji and the history of the National movement could be reconstructed. 8

OR

30 B. "The Quit India Movement genuinely a mass movement". Justify

SECTION D (Source Based Questions)

31 Read the source given below carefully and answer the questions that follow: 1+2+1 =4

The world beyond the palace.

Just as the Buddha's teachings were compiled by his followers, the teachings of Mahavira were also recorded by his disciples. These were often in the form of stories, which could appeal to ordinary people. Here is one example, from a Prakrit text known as the UttaradhyayanaSutta, describing how a queen named Kamalavati tried to persuade her husband to renounce the world: If the whole world and all its treasures were yours, you would not be satisfied, nor would all this be able to save you. When you die, O king and leave all things behind, dhamma alone, and nothing else, will save you. As a bird dislikes the cage, so do I dislike (the world). I shall live

as a nun without offspring, without desire, without the love of gain, and without hatred …Those who have enjoyed pleasures and renounced them, move about like the wind, and go wherever they please, unchecked like birds in their flight … Leave your large kingdom … abandon what pleases the senses, be without attachment and property, then practise severe penance, being firm of energy

31.1 Identify the person who persuaded the king to renounce the world.

31.2 "Oh king, dhamma alone and nothing else will save you"-. What does the word "dhamma" signifies and whose teachings was followed by the disciple?

31.3 Under which context the following statement "unchecked like birds in their flight…" was told by the disciple of Mahavira?

32. Read the source given below carefully and answer the questions that follow: 1+2+1 =4

A demon?

This is an excerpt from a poem by Karaikkal Ammaiyar in which she describes herself:
The female Pey (demoness) with . . . bulging veins, protruding eyes, white teeth and shrunken stomach, red haired and jutting teeth lengthy shins extending till the ankles, shouts and wails while wandering in the forest. This is the forest of Alankatu, which is the home of our father (Shiva) who dances
… with his matted hair thrown own in all eight directions, and with cool limbs.

32.1. How beauty has been personified by Karaikal Ammaiyar?

32.2. "Bulging veins, protruding eyes, white teeth and shrunken stomach", "Shouts and wails". State the reason behind the poet's condition in the excerpt given

32.3 Examine the phrase "With his matted hair thrown in all eight directions "

33. Read the following source carefully and answer the questions that follow. 1+1+2 =4

What should be the qualities of a national language?

A few months before his death Mahatma Gandhi reiterated his views on the language question:This Hindustani should be neither Sanskritised Hindi nor Persianised Urdu but a happy combination of both. It should also freely admit words wherever necessary from the different regional languages and also assimilate words from foreign languages, provided that they can mix well and easily with our national language. Thus, our national language must develop into a rich and powerful instrument capable of expressing the whole gamut of human thought and feelings. To confine oneself to Hindi or Urdu would be a crime against intelligence and the spirit of patriotism.
(HARIJANSEVAK, 12 OCTOBER 1947)

33.1) Explain the term 'multicultural language '.

33.2) What were the characteristics of the national language, in context to the source?

33.3) "The report of the Language Committee, promoted the spirit of patriotism" Give reasons.

SECTION -E (MAP BASED QUESTION)

34. 34.1 On the given political map of India, locate and label the following with appropriate symbols: 3+2=5

a. Kalibangan a Harappan site b. Agra, a territory under Babur, Akbar, and Aurangzeb
c. Sanchi, a Buddhist site. **OR** Ajanta, a Buddhist site

34.2. On the same outline map, two places have been marked as A and B, which are the centers of Indian National movement.
Identify them and write their correct names on the lines drawn near them.

NOTE: **The following question is for the visually impaired candidates in lieu of Question number 34.**

Name any five centres of the freedom movement of India..

A
B

केंद्रीय विद्यालय संगठन,अहमदाबाद संभाग **(SET- B)**

Kendriya Vidyalaya Sangathan, Ahmedabad Region

कक्षा बारहवीं प्री-बोर्ड II परीक्षा 2025-26

Pre-Board II Examination 2025-26 for Class XII

SUBJECT: ECONOMICS (030)

M.M. – 80 MARKS **TIME: 03:00 HOURS**

GENERAL INSTRUCTIONS:

1. This question paper contains two sections:
   Section A- Macro Economics
   Section B- Indian Economic Development
2. This paper contains 20 multiple choice questions type questions of 1 mark each.
3. This paper contains 4 Short Answer Questions type questions of 3 marks each to be answered in 60 to 80 words.
4. This paper contains 6 Short Answer Questions type questions of 4 marks each to be answered in 80 to 100 words.
5. This paper contains 4 Long Answer Questions type questions of 6 marks each to be answered in 100 to 150 words.

SECTION A: MACRO ECONOMICS

1 In order to tackle the problem of rising general price level in an economy, government may come up with a surplus budget to achieve the budget objective of _____

(i) Reallocation of resources
(ii) price stability
(iii) redistribution of income

Alternative:

(a)Only (i) (b) Only (ii) (c) Only (iii) (d) (i) and (iii)

2 _____ formulates the Fiscal Policy in the economy: -

(a) International Monetary Fund (b) Central Bank
(c) Central Government (d) Commercial Bank

3 Statement 1: Mixed income of self-employed is the income of own account.
Statement 2: Mixed income of self-employed is not included in the estimation of National income
In the light of the given alternatives, choose the correct alternative from the following:

(a) Statement 1 is true and statement 2 is false.
(b) Statement 1 is false and statement 2 is true
(c) Both statements 1 and 2 are true
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4 Which of the following does not explain the concept of depreciation? -
(a)An annual allowance for wear and tear of a capital goods.
(b) Cost of the capital good (minus scrap value) divided by number of years of its useful life
(c) Unexpected or sudden destruction or disuse of capital as can happen with accidents, natural calamities etc.
(d) Maintenance and replacement cost of existing capital goods etc.

5 If the borrowing, interest payment and revenue expenditure are 5000, 1000 and 4000 respectively. What is the fiscal deficit: -
(a) 8000 (b) 3000 (c) 5000 (d) 2000

6 **From the given alternatives choose the correct one:** 1
Assertion(A) At the break-even level of income, the value of Average Propensity to Consume is Zero.
Reason(R) Sum of Average Propensity to Consume and Average Propensity to Save is always equal to one.
Alternatives:
(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
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7 State Bank of India receives a deposit of Rs 100000 and the reserve requirement is 10%. If the bank decides to hold reserves equal to 20% of the deposit instead of the required amount, how much excess reserve does the bank hold? 1
(a) 20000 (b)10000 (c) 15000 (d) 25000

8 What is the value of Investment multiplier, when 1
C= -100+0.5Y
(a) 3 (b) 8 (c) 2 (d) 5

9 A Decrease in the value of US Dollar in terms of Indian Rupee 1
(a) Increase in foreign exchange rate that result in decreased export
(b) Decrease in foreign exchange rate that result in Increased export
(c) Increase in foreign exchange rate that results in decreased import
(d) Decrease in foreign exchange rate that result in Increased import

10 Ms Shweta, a teacher, was explaining in her class about various types of deposits with the commercial banks, she quoted that – 1
"These deposits form a part of M1 measure of money supply and are payable on demand by the commercial bank:
Identify the type of deposits she was explaining about and choose the correct alternative
(1) Demand Deposits (2) Time Deposits (3) Post Office Deposits
Alternative:
(a) Only (i) (b) Only (ii)
(c) (i) and (ii) (d) (i) (ii) and (iii)

11 Many goods and services which may contribute to welfare, but are not included in estimating Gross Domestic Product. "Do you agree with the given statement? Give valid reason in support of your answer 3

OR

Using a suitable numerical example, distinguish between Real Gross Domestic Product and Nominal Gross Domestic Product.

12 Elaborate the 'Banker's Bank and 'Supervisor function performed by the Reserve Bank of India. 3

13 What are the fiscal measures to correct excess and deficit demand? 4

14 Giving the following dat estimate the values of (i) Revenue Deficit (ii) Fiscal Deficit 2+2

S.NO.	PARTICULAR	Rs Crore
1	TAX REVENUE	1000
2	NOT-TAX REVENUE	150
3	NET BORROWINGS BY GOVERNMENT	780
4	DISINVESTMENT PROCEEDS	50
5	REVENUE EXPENDITURE	1500
6	CAPITAL EXPENDITURE	480

OR

Classify the following statements into revenue receipts and capital receipts give valid reasons in support of your answer 2

1. Sale of shares of a public sector undertaking to a private company
2. Dividend paid to the government by the state bank of India 2

15 "Under the flexible exchange rate system, the Central Bank does not intervene in the foreign exchange market. Justify the statement, giving valid arguments. 4

OR

Explain the impact of home currency depreciation on the exports of a nation.

16 How will you treat the following while estimating the National Income of India? Give Reason.

(i) Rent earned by an Indian resident from his building in Japan. 2

(ii) Profits earned by a branch of a British Bank in India. 2

(iii)Calculate the Operating Surplus 2

S.NO.	PARTICUALR	Rs Crore
1	COMPENSATION OF EMPLOYEE	110
2	NET INDIRECT TAX	150
3	DEPRICIATION	50
4	NET FACTOR INCOME FROM REST OF THE WORLD	155
5	INCOME FROM ENTREPRENEURSHIP AND PROPERTY FROM REST OF THE WORLD	75
6	GROSS DOMESTIC PRODUCT AT MARKET PRICE	1050
7	MIXED INCOME OF SELF-EMPLOYED	500

OR

2+2+2

Calculate the Closing Stock, National Income and Government Final Consumption Expenditure: -

S.NO.	PARTICULAR	Rs in crore
1	PRIVATE FINAL CONSUMPTION EXPENDITURE	900
2	NET DOMESTIC FIXED CAPITAL FORMATION	2100
3	NET FACTOR INCOME TO ABORAD	40
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5	NET INDIRECT TAXES	150
6	OPENING STOCK	100
7	GROSS DOMESTIC CAPITAL FORMATION	2800
8	CONSUMPTION OF FIXED CAPITAL	550
9	NET EXPORT	700

17 Describe the situation of deficit aggregate demand at full employment level. Explain how monetary policy measures can control this situation. 6

SECTION B: INDIAN ECONOMIC DEVELOPMENT

18 C**hoose the correct alternative showing chronological order of the following events.** 1

1. One child policy
2. Economic reforms in Pakistan
3. New economic policy in India
4. Commune system in agriculture in China

Alternatives –

(A) 2, 4, 3, 1
(B) 4, 2, 1, 3
(C) 3, 4, 1, 2
(D) 4, 1, 2, 3

19 **Read the following statements - Assertion (A) and Reason (R):** 1

Assertion (A): In India, financial sector is regulated and controlled by the Reserve Bank of India.

Reason (R): Prior to liberalization, tax structure was quite complex and tax rates were quite high.

From the given alternatives choose the correct one:

Alternatives:

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

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(C) Assertion (A) is true but Reason (R) is false.

(D) Assertion (A) is false but Reason (R) is true.

20 From the set of statements given in Column I and Column II, choose the correct pair of statements: 1

A	OUTSOURCING	I	AN IMPORTANT OUTCOME OF THE PROCESS OF LIBERALISATION
B	FOREIGN EXCHANGE REFORMS	II	INITIATED WITH THE DEVALUATION OF THE INDIAN RUPEE AGAINST FOREIGN CURRENCY
C	GST	III	A DIRECT TAX
D	CONTRACTION OF PUBLIC SECTOR	IV	A MEASURE OF PRIVATISATION

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

21 On the eve of independence, India was net exporter of 1

(a) Primary Product (b) Industrial Products
(c) Capital goods (d) All of these

22 1

Identify the issue depicted in the given image.

(a) Demographic dividend (b) Exponential population growth
(c) Aging of population (d) None of these

23 **From the given alternatives choose the correct one:** 1

Assertion(A) Human Capital is not traded in the market however its services are traded.
Reason(R) Human capital is intangible in nature.
Alternatives:
(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

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24 The government of India enacted the right to Education Act to make free education a fundamental right of all children in the age group 1

6-14 (b) 6-12 (c) 5-18 (d) 6-19

25 _____ is a process, which includes all the activities from sowing till sale of the final produce in the market. 1

(a) Rural Development (b) Self Help Groups
(c) Organic Farming (d) Agricultural Marketing

26 India entered the _____ stage of Demographic Transition after the year 1921 1

(a)Second (b) Fourth (c) First (d) Fifth

27 Statement 1:Dual price policy in China was an attempt to encourage industrialisation 1
Statement 2:Special Economic Zones has been an attempt to attract foreign capital in the country
Alternatives:
(a) Both the statement are true
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(c) Statement 1 is true and statement 2 is false
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28 "Import substitution is a good way of protecting the domestic industry." Justify the statement. 3

OR

While subsidies encourage farmers to use new technology, they are a huge burden on government finances. Discuss the usefulness of subsidies in light of this fact.

29 What do you mean by Organic Farming? Write its benefits. 3

30 "Recently the Government of India has taken numerous steps towards increasing the farmer's income through agricultural diversification." 4
In light of the above statement, explain the need and advantage of diversification in agriculture.

OR

"The Prime Minister urged to increase the rural income by increasing non-farm activities.: Explain how non-farm activities can lead to rise in income of people in rural sector?

31 "If the rate of resource extraction exceeds the rate of regeneration, it leads to reduction in carrying capacity of the environment. "Discuss the rationale of the given statement with valid reason. 4

OR

'Pesticides are chemical compounds designed to kill pests. Many pesticides can also pose health risks to people even if exposed to nominal quantities.'
In the light of the above statement, suggest any two traditional methods for replacement of the chemical pesticides.

32

COUNTRY	1980-907	2015-17
INDIA	5.7	7.3
CHINA	10.3	6.8

On the basis of the data given in above table:
A nalyse the GDP indicator with respect to India and China 2
B. State the reason behind GDP growth of India during the 2015-17. 2

33 "Infrastructure and other resources developed by British government during colonial period their own benefit but it will be positive impact on the Indian economy." Justify the statement. 6

OR

"Five Year Plan is vital instrument for achieve specific objectives of economic development in India after the independence." Elaborate the statement with objectives of Five-Year Plan.

34 The environment performs several crucial functions that support life on Earth. These functions include:

- Provision of Essential Resources: The environment provides us with essential resources such as air, water, food, and minerals that are necessary for human survival.
- Regulation of Climate: The environment regulates the Earth's climate, which is essential for maintaining life-supporting conditions.
- Supports Biodiversity: The environment supports a wide range of plant and animal species, maintaining ecosystem balance and promoting biodiversity.
- Waste Management: The environment helps to break down and recycle organic waste, reducing the impact of pollution.

Challenges Facing the Environment Despite its importance, the environment faces numerous challenges, including:

- Climate Change: Global warming and climate change are significant threats to the environment, causing rising sea levels, more frequent natural disasters, and altered ecosystems.
- Pollution: The release of pollutants into the air, water, and soil harms the environment and human health.
- Deforestation and Land Degradation: The clearance of forests and degradation of land reduce biodiversity, increase greenhouse gas emissions, and disrupt ecosystems.
- Overexploitation of Resources: The overuse of natural resources, such as water and minerals, can lead to their depletion and harm the environment.

Importance of Environmental Conservation Given the importance of the environment and the challenges it faces, conservation efforts are essential to protect and sustain the environment. This can be achieved through:

- Sustainable Practices: Adopting sustainable practices, such as reducing energy consumption and using renewable energy sources, can help reduce the impact of human activities on the environment.
- Conservation of Natural Resources: Conserving natural resources, such as water and forests, is crucial for maintaining ecosystem balance and promoting biodiversity.
- Reducing Pollution: Implementing policies and practices to reduce pollution can help protect the environment and human health.
- Environmental Education and Awareness: Educating people about the importance of environmental conservation and promoting awareness about environmental issues can inspire individuals to take action to protect the environment.

(A). "The environment performs various activities which support and affect the life. "In this context explain the various function of the environment. 3

(B). "Environment is important element of the human being, despite of the importance of environment facing various challenges." Elaborate the statement with challenges facing to maintain the environment. 3

केंद्रीय विद्यालय संगठन,अहमदाबाद संभाग (SET- A)

Kendriya Vidyalaya Sangathan, Ahmedabad Region

कक्षा बारहवीं प्री-बोर्ड II परीक्षा 2025-26

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SECTION B: INDIAN ECONOMIC DEVELOPMENT

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(a) 6-14 (b) 6-12 (c) 5-18 (d) 6-19

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23 Choose the correct alternative showing chronological order of the following events. 1
1. One child policy 2. Economic reforms in Pakistan
3. New economic policy in India 4. Commune system in agriculture in China
Alternatives –
(A) 2, 4, 3, 1 (B) 4, 2, 1, 3 (C) 3, 4, 1, 2 (D) 4, 1, 2, 3

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Assertion (A): In India, financial sector is regulated and controlled by the Reserve Bank of India.
Reason (R): Prior to liberalization, tax structure was quite complex and tax rates were quite high.
From the given alternatives choose the correct one:
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25 From the set of statements given in Column I and Column II, choose the correct pair of statements:

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C	GST	III	A DIRECT TAX
D	CONTRACTION OF PUBLIC SECTOR	IV	A MEASURE OF PRIVATISATION

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

26 On the eve of independence, India was net exporter of 1

(a) Primary Product (b) Industrial Products
(c) Capital goods (d) All of these

27 1

Identify the issue depicted in the given image.

(a) Demographic dividend (b) Exponential population growth
(c) Aging of population (d) None of these

28 "Import substitution is a good way of protecting the domestic industry." Justify the statement. 3

OR

While subsidies encourage farmers to use new technology, they are a huge burden on government finances. Discuss the usefulness of subsidies in light of this fact.

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"The Prime Minister urged to increase the rural income by increasing non-farm activities.: Explain how non-farm activities can lead to rise in income of people in rural sector?

31 "If the rate of resource extraction exceeds the rate of regeneration, it leads to reduction in carrying capacity of the environment. "Discuss the rationale of the given statement with valid reason. 4

OR

'Pesticides are chemical compounds designed to kill pests. Many pesticides can also pose health risks to people even if exposed to nominal quantities.'
In the light of the above statement, suggest any two traditional methods for replacement of the chemical pesticides.

32

COUNTRY	1980-907	2015-17
INDIA	5.7	7.3
CHINA	10.3	6.8

On the basis of the data given in above table:
A analyse the GDP indicator with respect to India and China 2
B. State the reason behind GDP growth of India during the 2015-17. 2

33 "Infrastructure and other resources developed by British government during colonial period their own benefit but it will be positive impact on the Indian economy." Justify the statement. 6

OR

"Five Year Plan is vital instrument for achieve specific objectives of economic development in India after the independence." Elaborate the statement with objectives of Five-Year Plan.

34 The environment performs several crucial functions that support life on Earth. These functions include:

- Provision of Essential Resources: The environment provides us with essential resources such as air, water, food, and minerals that are necessary for human survival.
- Regulation of Climate: The environment regulates the Earth's climate, which is essential for maintaining life-supporting conditions.
- Supports Biodiversity: The environment supports a wide range of plant and animal species, maintaining ecosystem balance and promoting biodiversity.
- Waste Management: The environment helps to break down and recycle organic waste, reducing the impact of pollution.

Challenges Facing the Environment Despite its importance, the environment faces numerous challenges, including:

- Climate Change: Global warming and climate change are significant threats to the environment, causing rising sea levels, more frequent natural disasters, and altered ecosystems.
- Pollution: The release of pollutants into the air, water, and soil harms the environment and human health.
- Deforestation and Land Degradation: The clearance of forests and degradation of land reduce biodiversity, increase greenhouse gas emissions, and disrupt ecosystems.
- Overexploitation of Resources: The overuse of natural resources, such as water and minerals, can lead to their depletion and harm the environment.

Importance of Environmental Conservation Given the importance of the environment and the challenges it faces, conservation efforts are essential to protect and sustain the environment. This can be achieved through:

- Sustainable Practices: Adopting sustainable practices, such as reducing energy consumption and using renewable energy sources, can help reduce the impact of human activities on the environment.
- Conservation of Natural Resources: Conserving natural resources, such as water and forests, is crucial for maintaining ecosystem balance and promoting biodiversity.
- Reducing Pollution: Implementing policies and practices to reduce pollution can help protect the environment and human health.
- Environmental Education and Awareness: Educating people about the importance of environmental conservation and promoting awareness about environmental issues can inspire individuals to take action to protect the environment.

(A). "The environment performs various activities which support and affect the life. "In this context explain the various function of the environment.

(B). "Environment is important element of the human being, despite of the importance of environment facing various challenges." Elaborate the statement with challenges facing to maintain the environment. 3

3

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

प्री-बोर्ड परीक्षा:**2025-26** **SET-B**

PRE-BOARD EXAMINATION-II: 2025-26

SUBJECT : Business Studies (054) **TIME: 3 HOURS**
CLASS : XII **MM: 80**

सामान्य निर्देश/GENERAL INSTRUCTIONS:

Read the following instructions very carefully and strictly follow them:
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2.All questions are compulsory.
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6.Answers to questions carrying 4 marks may be in about 150 words.
7.Answers to questions carrying 6 marks may be in about 200 words.
8.Attempt all parts of a question together.

1 The Financial Manager of RK Ltd. pays more attention towards an increase of 3% in the marketing cost as compared to a 15% increase in the courier expenses. Identify the concept being used by the manager. 1
(a) Management by exception (b) Critical point control
(c) Corrective action (d) None of the above

2 Read the following statements carefully: 1
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3 Sunrise Cement Ltd.' supports 7 villages with housing facilities, schools, safe drinking water, health and hygiene. The company sends its employees to visit a nearby village every 15 days to provide support and to see whether the facilities provided are being implemented on ground. The objective which 'Sunrise Cement Ltd.' is trying to achieve is : 1
(A) Personal objective (B) Social objective
(C) Organizational objective (D) Economic objective

4 The management of Anamika Ltd. strongly believes that the members of the organization should work toward fulfilled the common organizational goals. This requires team work and integration of efforts of all individuals' departments and specialists. This is because all the individuals and departments depend on each other for information and resources to perform their respective activities. Manager needs 1

to reconcile differences in approach, timing, efforts and interest. At the same time, it should enable all its members to grow and develop. Thus, there is a need to harmonize individual goals and organizational goals. Identify the function of management

(A) Planning (B) Coordination
(C) Organizing (D) Directing

5 For the following two statements, choose the correct option: 1
Statement I: Environmental awareness can help managers to identify various threats on time and serve as an early warning signal.
Statement II: A good understanding of environment by business managers enables them not only to identify and evaluate, but also to react to the forces external to their firms. Choose the correct option from options given below:
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6 Priya, a finance manager, ensures that her company maintains a balance between debt and equity. She also ensures that the company's investment and dividend decisions aim to enhance the value of shareholders. Which objective of financial management is Priya primarily fulfilling? 1
A. Reducing production costs
B. Maximization of shareholder's wealth
C. Profit maximization in the short-term
D.Cost control in administrative departments

7 The Finance Manager of Sun Pharma Limited, Mr Arjun Rawat wants to raise funds through debt or equity to the extent of Rs 5 crores. For this purpose, he approaches a well-regulated financial market that facilitates the mobilisation of long-term capital for companies. Identify the market where Mr Arjun Rawat can raise the funds. 1
a) Money market b) Secondary market
c) Capital market d) Wholesale debt market

8 Choose the statement that correctly highlights the benefit of using external sources of recruitment 1
(a)Competitive spirit among the existing staff
(b) Reduction in employee turnover
(c) Helps in increasing employee's satisfaction
(d) Develops a sense of security amongst employees

9 Rakesh is working under his superior Neeraj. He always communicates useful ideas and suggestions to his superior regarding reduction of cost, improvement in the product, etc. Neeraj implements his suggestions and has always found favourable results, but he never appreciates Rakesh for his suggestions. Now Rakesh decided not to communicate any suggestion or idea to Neeraj. 1
Identify the communication barrier.
(a)Semantic barriers (b) Personal Barriers
(c)Organizational barriers (d) psychological barriers

10 Which of the following is the appropriate order of hierarchy of needs according to Abraham Maslow? 1

(a) Safety Needs → Physiological needs → Affiliation needs → Esteem Needs → Self Actualization needs
(b) Physiological needs → Safety Needs → Affiliation needs → Esteem Needs → Self Actualization needs
(c) Affiliation needs → Safety Needs → Psychological needs → Esteem Needs → Self Actualization needs
(d) Physiological needs → Safety Needs → Esteem Needs → Affiliation needs → Self Actualization needs

11 Arjun Ltd. is a natural and ethical firm that specialises in providing organic bathing items for men and women. The company uses plant-based elements in its goods and is the country's leading organic brand. It not only meets the needs of its clients, but it also believes in environmental conservation as a whole. Determine the marketing management philosophy that 'Beauty Products Ltd.' employs. 1
(a) Social marketing concept (b) Selling concept
(c) Production concept (d) Product concept

12 Match the various Selection Tests' in column-I with their respective statements in column-II: 1

Column-I		Column-II	
A	Aptitude Test	(i)	It indicates the person's capacity to develop
B	Trade Test	(ii)	It is used to measure the existing skills of the individual.
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D	Intelligence Test	(iv)	It is used to know clues to a person's emotions

Choose the correct option from the following:
(a) A-(ii), B-(i), C-(iii), D-(iv) (b) A-(i), B-(ii), C-(iv), D-(iii)
(c) A-(iii), B-(i), C-(ii), D-(iv) (d) A-(iii), B-(ii), C-(i), D-(iv)

13 Read the following statements: Assertion and Reason. Choose one of the correct alternatives given below: 1
Assertion(A): If Mohan, an employee of production department is asked to go slow in production to maintain quality standard by the production manager and sales manager instructs the employee to fasten the production to meet the pending orders. In the situation employee will get confused as to whose instruction must be followed by him.
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14 Arrange the following in chronological order: 1
1. Evaluating alternative courses
2. Identifying alternative courses of action
3. Follow-up action
4. Setting Objectives

5. Implementing the plan
6. Developing Premises
7. Selecting an alternative

Choose the correct option:

(a) 4,6,2,1,7,5,3 (b) 3,6,7,1,2,5,4

(c) 1,5,2,4,7,6,3 (d) 4,1,5,6,7,2,3

15 XYZ ltd is constructing the building to open its new Branch which decision is depicted in the picture below? 1

Select one of the following.

a) Dividend Decision b) Financing Decision

c) Capital budgeting Decision d) Financial Decision

16 Rovex' was a large company with a renowned name in healthcare industry, specialising in the development and production of life saving medications and medical devices. With a strong reputation for ethical practices, 'Rovex' attracted a large number of investors who had great faith in the company's future. This allowed 'Rovex' to raise capital easily from the market whenever expansion or new projects were to be undertaken. As a result, it could pay high dividends to the shareholders. The factor affecting dividend decision discussed above, which allowed 'Rovex' to pay high dividends to the shareholders is: 1

(a) Cash flow position (b) Legal constraints

(c) Stock market reaction (d) Access to capital market

17 Rama had a bookstore in Sabad called 'Book-mark. For years, the bookstore was doing reasonably well but with the rise of digital books and online retailers, her sales had declined. Rama's daughter, who had just completed her MBA with a specialisation in marketing decided to launch a marketing campaign to revive the bookstore. The campaign's focus was on the joy of reading books in physical form, the joy of turning pages and the warm atmosphere of the bookstore. She organised story writing and other competitions every weekend. The information of these was given to the parents and children through television, radio, children's magazines, etc. Attractive prizes were offered to the winners. This increased the footfall of the children and their parents and the bookstore soon became popular. The tool of communication used by Rama's daughter to revive the bookstore was: 1

(A) Advertising (B) Personal selling

(C) Public relations (D) Sales Promotion

18 OM Sweets is a renowned name for quality sweets since 1915. Amrit, the owner of OM sweets was worried as the sales had declined during the last two months. When he enquired from the Sales Manager, the Sales Manager reported that there were some complaints about the quality of sweets. Therefore, Amrit ordered for sample checking of sweets. _____ step taken by Amrit that is related to one of the functions 1

of management.

(a) Measurement of actual performance. (b) Corrective action

(c) Comparison of actual performance with standards (d) Finding deviations

19 Increase in the profit earned by the equity shareholders due to the presence of fixed financial charges like interest' is called: 1

(A) Financial planning (B) Dividend decision

(C) Financing decision (D) Trading on equity

20 A start-up is evaluating whether to raise capital through issuing shares or by taking a long-term loan. The finance manager suggests issuing equity to avoid fixed obligations. Which factor is being considered in the financing decision? 1

A. Risk factor B. Control consideration

C. Floatation cost D. Tax planning

21 Delegation is the entrustment of responsibility and authority to another and the creation of accountability for performance'. In the light of this statement identify and explain the essential elements of delegation 3

OR

Manoj Limited is a famous company under different food materials. Mr Manoj is the managing director of the company. He is fully attached to the employees of his company. This is the very reason that before taking any decision he concerns all the concerned employees. A suggestion box has also been provided in the company. It is open once a week and employees giving positive suggestions are rewarded. Besides all the employees of the company also enjoy full freedom to communicate with any superior anytime concerning matters of both related to job or their personal life.

A) Identify the type of organization.

B) State any one advantage and one disadvantage of the type of organization identified above.

22 Explain any three functions of Stock Exchange. 3

OR

State any three 'Regulatory functions' of Securities and Exchange Board of India.

23 Ashima purchased a bottle of tomato-sauce from the local grocery shop. The information provided on the bottle was not clear. She fell sick on consuming it. She filed a case in the District Forum under Consumer Protection Act and got the relief. Identify and also Explain briefly any two functions of the aspect neglected by the marketer. 3

24 Mahek Ltd. is a well-known cement company in India. It is able to earn adequate revenues to cover costs. Its capital base, number of employees and production turnover has increased manifolds over the years. The rate of profitability of the business is also creditable. The employees of the company are happy and satisfied with their remuneration, working conditions, promotion policy etc. As a part of its moral obligation, the company has taken many initiatives for providing employment to especially abled persons and promoting literacy in the villages adopted by it. In the context of the above case: 3

Identify and explain the various types of objectives of management being fulfilled by Mahek Ltd.

25 Identify the function performed by the public relations department / mentioned in the following cases: 4

1.An innovative organisation involved in the manufacturing of electronic products launches its products in the trade fair every year. This is done to gain attention of

the general public towards the quality and technology of its products.
2.An FMCA company involved in the production of more than two hundred products has very good relations with the top 5 News Channels. This gives a great support to the company when it comes to generating positive image in the eyes of the public.
3.A multi-national company has presence in five continents and thirty countries. The company manages good relations with the top officials and the ministers of these countries. This helps the company to keep an eye on the various possible changes in the laws of the land and their execution.
4.Ramesh who is the head of the Public Relations department of a well-established company utilizes PR tools like Brochures, Annual reports, Newsletters etc. He ensures that the top-level managers of the company connect with TV channels and give interviews whenever required. All his efforts have resulted in creating a good image of the company with its target audience.

OR

Energy drinks India Ltd.' has scanned a profitable opportunity for marketing of soft drinks with 'Indian Traditional Flavour'. The company wants to market its products in India and in neighboring countries. A Board meeting of the company was held on 14.12.2015 wherein the marketing manager was asked to give a presentation to develop this market offering.
For this it was also decided to set-up its manufacturing unit in a village of Bihar. This will not only help in the development of the village but will also provide employment to the youth of the village. The marketing manager chooses a combination of variables to prepare its market offering. He used a set of marketing tools that firm will use to pursue its marketing objectives in the target market.
Name and state the concept of marketing used by the marketing manager for creating its market offering. Also, explain briefly the various elements of this concept.

26 Identify the types of plans in the following cases: 4

a. Rajat is a senior middle level manager. He is busy in allocating resources to his staff; he has also finalised the objectives and decided the comprehensive course of action to be followed in the long run. He is expecting energy in his staff for the whole season but he will have to be cautious.

b. Akhilesh is giving a speech to the workers of his factory. He is the owner of a toy manufacturing factory and has 150 workers. He tells them that this year's target of production is 7.5 lakh toys.

c. On the wall of 'Jeevan Jyoti' hospital a board is hanging. On this board. It is written 'We care for the health of senior citizens as our topmost priority'. This hospital is known for treating people aged more than 45 years.

d. Bhagat ram calls his new subordinates for a meeting. He is a top-level manager. He arranges for a power point presentation to train his subordinates who are all middle level managers. He tells them the way of doing task of treating suppliers through a new software system to be installed within next 30 days.

27 The Government is considering a pioneer proposal to launch a single debit-cum credit card to increase the ease and usage for the consumers. The card which will be called the "National 4 22 Mobility Card" will have unique advantages for making payments in metro, buses, parking and making transactions during visits abroad. After hearing this news, Mega Bank decided to launch a "Mega Mobility Card" on similar lines, so that they could be the first to exploit the opportunity, arising due to the increasing trend of digitization. In order to improve their performance, they laid down a plan to hire more people in their marketing department and prepared guidelines to train their sales force to market the new card facility being launched by the bank. By quoting the lines, identify and explain the importance of understanding Business Environment discussed above. 4

28 Darbar Ltd. is a large manufacturing unit. Recently, the company has conducted the 'time' and 'motion' studies and concluded that on an average a worker could produce 120 units per day. However, it has been noticed that average daily production of a worker is in the range of 80-90 units. Which function of management is needed to ensure that the actual performance is in accordance with the performance as per 'time' and 'motion 'Studies? 4
State any three features of the identified function of management.

29 A software company, Tech Zen, is hiring software developers. After receiving over 500 applications, the HR team conducted a preliminary screening based on qualifications and experience. Shortlisted candidates were then called for a written test assessing their programming skills. Next, they were interviewed by a technical panel. Finally, selected candidates had to go through a medical examination before being issued an appointment letter. 4
Identify the process and briefly explain the stages of the process followed by Tech Zen

OR

Entertainment India Ltd. has been incorporated with the objective of entertaining people by organising festivals, programmes and other similar events depicting the rich cultural heritage of the country. The company management has renowned personalities from the field of art, literature and culture. They decided to give a platform to young budding musicians, poets and artists. The company decided its organisational structure by grouping similar jobs together. Thereafter, the heads of different departments were also appointed. Nisha, one of the heads, did an analysis of the number, type and qualification necessary for people to be appointed. The information generated in the process of writing the job description and the candidate profile was used to develop 'Situations vacant' advertisement. This was published in print media and flashed in electronic media. This brought in a flood of response. Explain the other steps which Nisha has to perform to complete the process being discussed above.

30 Sanjeev Ltd. was engaged in the business of manufacturing electronic component. Its business was expanding due to increased demand for AC. The competition was also increasing. In order to keep its market, share intact, the company directed its workforce to work overtime and also advice to sacrifice personal objective to achieve organitional objectives. But this resulted in many problems. Due to increased pressure of work the efficiency of workers declined. Sometimes, the subordinates had to work for more than one superior. The workers were becoming indiscipline. 4

The spirit of teamwork had begun decline.
Identify principles of management (as given by Henry Fayol) which were being violated, quoting the lines from the above case.

31 Identify and explain the elements of directing in the following cases: 6
1. Harihar who is the departmental head of his organisation decides to improve the performance of his department. He decides to give some financial and non-financial incentives to his subordinates. He knows these incentives will satisfy their needs. Therefore, they will be stimulated to take actions from their side.
2. Sanjeev is an HR manager leading a team of 12 people. He knows that the duties and responsibilities of an HR employee are challenging. He knows in order to make his team work with a positive frame of mind, he will have to set a personal example as a role model and influence their behaviour and working style to increase the output of his team.
3. Pritam and Radha are discussing about an element of directing. They say that without this element no group or people can achieve a common understanding. This element requires effort from both the sides and consumes 90% of the time of a manager.
4. Roshan who works at the shop floor is a lower level manager. He is heading a team of 25 workers. He oversees and guides their efforts on a regular basis and tries to maximize the output of his unit by timely giving them feedback. His team has group unity and works with dedication to complete their targets on time.

32 A) State any six reliefs available to a consumer under Consumer Protection Act, 2019. 6

OR

B) State the rights available under Consumer Protection Act, 2019 for the protection and promotion of interest of consumers.

33 Neeraj Gupta started a company 'YoYo Ltd.' with ten employees, to assemble economical computers for the Indian rural market. The company did very well in its initial years. As the product was good and marketed well, the demand went up. To increase production the company decided to recruit additional employees. Neeraj Gupta, who was earlier taking all decisions for the company, had to selectively disperse the authority. He believed that people are competent, capable and resourceful and can assume responsibility for effective implementation of their decisions. This paid off and the company was not only able to increase its production but also expanded its product range with different features. 6
(a) Identify the concept used by Neeraj Gupta through which he was able to steer his company to greater heights.
(b) Explain any five points of importance of this concept.

34 Sunrise Ltd. is planning to expand its operations and requires Rs 20 crore. The Finance Manager suggests raising Rs 15 crore through debt and Rs 5 crore through equity, as interest on debt is tax-deductible. However, the CEO is concerned that excessive use of debt might increase the company's financial risk and reduce flexibility in future financing. 6
Based on the above case, answer the following questions:
1. Identify and define the financial concept discussed in the case.
2. State two advantages of using debt in identified in (a) above.
3. State any three factors the company should consider identified in (a) above case.

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

प्री-बोर्ड परीक्षा:**2025-26** **SET-A**

PRE-BOARD EXAMINATION-II: 2025-26

SUBJECT : Business Studies (054) TIME : 3 HOURS
CLASS : XII MM : 80

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A. Reducing production costs
B. Maximization of shareholder's wealth
C. Profit maximization in the short-term
D.Cost control in administrative departments

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Select one of the following.
a) Dividend Decision
b) Financing Decision
c) Capital budgeting Decision
d) Financial Decision

16 Rovex' was a large company with a renowned name in healthcare industry, specialising in the development and production of life saving medications and medical devices. With a strong reputation for ethical practices, 'Rovex' attracted a large number of investors who had great faith in the company's future. This allowed 'Rovex' to raise capital easily from the market whenever expansion or new projects were to be undertaken. As a result, it could pay high dividends to the shareholders. The factor affecting dividend decision discussed above, which allowed 'Rovex' to pay high dividends to the shareholders is: 1
(a) Cash flow position
(b) Legal constraints
(c) Stock market reaction
(d) Access to capital market

17 Rama had a bookstore in Sabad called 'Book-mark. For years, the bookstore was doing reasonably well but with the rise of digital books and online retailers, her sales had declined. Rama's daughter, who had just completed her MBA with a specialisation in marketing decided to launch a marketing campaign to revive the bookstore. The campaign's focus was on the joy of reading books in physical form, the joy of turning pages and the warm atmosphere of the bookstore. She organised story writing and other competitions every weekend. The information of these was given to the parents and children through television, radio, children's magazines, etc. Attractive prizes were offered to the winners. This increased the footfall of the children and their parents and the bookstore soon became popular. The tool of communication used by Rama's daughter to revive the bookstore was: 1
(A) Advertising
(B) Personal selling
(C) Public relations
(D) Sales Promotion

18 Arjun Ltd. is a natural and ethical firm that specialises in providing organic bathing items for men and women. The company uses plant-based elements in its goods and is the country's leading organic brand. It not only meets the needs of its clients, but it also believes in environmental conservation as a whole. Determine the marketing management philosophy that 'Beauty Products Ltd.' employs. 1

(a) Social marketing concept (b) Selling concept
(c) Production concept (d) Product concept

19 Increase in the profit earned by the equity shareholders due to the presence of fixed financial charges like interest' is called: 1
(A) Financial planning (B) Dividend decision
(C) Financing decision (D) Trading on equity

20 A start-up is evaluating whether to raise capital through issuing shares or by taking a long-term loan. The finance manager suggests issuing equity to avoid fixed obligations. Which factor is being considered in the financing decision? 1
A. Risk factor B. Control consideration
C. Floatation cost D. Tax planning

21 Delegation is the entrustment of responsibility and authority to another and the creation of accountability for performance'. In the light of this statement identify and explain the essential elements of delegation 3

OR

Manoj Limited is a famous company under different food materials. Mr Manoj is the managing director of the company. He is fully attached to the employees of his company. This is the very reason that before taking any decision he concerns all the concerned employees. A suggestion box has also been provided in the company. It is open once a week and employees giving positive suggestions are rewarded. Besides all the employees of the company also enjoy full freedom to communicate with any superior anytime concerning matters of both related to job or their personal life.
A) Identify the type of organization.
B) State any one advantage and one disadvantage of the type of organization identified above.

22 Explain any three functions of Stock Exchange. 3

OR

State any three 'Regulatory functions' of Securities and Exchange Board of India.

23 Ashima purchased a bottle of tomato-sauce from the local grocery shop. The information provided on the bottle was not clear. She fell sick on consuming it. She filed a case in the District Forum under Consumer Protection Act and got the relief. Identify and also Explain briefly any two functions of the aspect neglected by the marketer. 3

24 Mahek Ltd. is a well-known cement company in India. It is able to earn adequate revenues to cover costs. Its capital base, number of employees and production turnover has increased manifolds over the years. The rate of profitability of the business is also creditable. The employees of the company are happy and satisfied with their remuneration, working conditions, promotion policy etc. As a part of its moral obligation, the company has taken many initiatives for providing employment to especially abled persons and promoting literacy in the villages adopted by it.In the context of the above case: 3
Identify and explain the various types of objectives of management being fulfilled by Mahek Ltd.

25 Identify the function performed by the public relations department / mentioned in the following cases: 4

1. An innovative organisation involved in the manufacturing of electronic products launches its products in the trade fair every year. This is done to gain attention of the general public towards the quality and technology of its products.
2. An FMCA company involved in the production of more than two hundred products has very good relations with the top 5 News Channels. This gives a great support to the company when it comes to generating positive image in the eyes of the public.
3. A multi-national company has presence in five continents and thirty countries. The company manages good relations with the top officials and the ministers of these countries. This helps the company to keep an eye on the various possible changes in the laws of the land and their execution.
4. Ramesh who is the head of the Public Relations department of a well-established company utilizes PR tools like Brochures, Annual reports, Newsletters etc. He ensures that the top-level managers of the company connect with TV channels and give interviews whenever required. All his efforts have resulted in creating a good image of the company with its target audience.

OR

Energy drinks India Ltd.' has scanned a profitable opportunity for marketing of soft drinks with 'Indian Traditional Flavour'. The company wants to market its products in India and in neighboring countries. A Board meeting of the company was held on 14.12.2015 wherein the marketing manager was asked to give a presentation to develop this market offering. For this it was also decided to set-up its manufacturing unit in a village of Bihar. This will not only help in the development of the village but will also provide employment to the youth of the village. The marketing manager chooses a combination of variables to prepare its market offering. He used a set of marketing tools that firm will use to pursue its marketing objectives in the target market.

Name and state the concept of marketing used by the marketing manager for creating its market offering. Also, explain briefly the various elements of this concept.

26 Identify the types of plans in the following cases: 4

a. Rajat is a senior middle level manager. He is busy in allocating resources to his staff; he has also finalised the objectives and decided the comprehensive course of action to be followed in the long run. He is expecting energy in his staff for the whole season but he will have to be cautious.

b. Akhilesh is giving a speech to the workers of his factory. He is the owner of a toy manufacturing factory and has 150 workers. He tells them that this year's target of production is 7.5 lakh toys.

c. On the wall of 'Jeevan Jyoti' hospital a board is hanging. On this board. It is written 'We care for the health of senior citizens as our topmost priority'. This hospital is known for treating people aged more than 45 years.

d. Bhagatram calls his new subordinates for a meeting. He is a top-level manager. He arranges for a power point presentation to train his subordinates who are all middle level managers. He tells them the way of doing task of treating suppliers through a new software system to be installed within next 30 days.

27 The Government is considering a pioneer proposal to launch a single debit-cum credit card to increase the ease and usage for the consumers. The card which will be called the "National 4 22 Mobility Card" will have unique advantages for making payments in metro, buses, parking and making transactions during visits abroad. After hearing this news, Mega Bank decided to launch a "Mega Mobility Card" on similar lines, so that they could be the first to exploit the opportunity, arising due to the increasing trend of digitization. In order to improve their performance, they laid down a plan to hire more people in their marketing department and prepared guidelines to train their sales force to market the new card facility being launched by the bank. By quoting the lines, identify and explain the importance of understanding Business Environment discussed above. 4

28 Darbar Ltd. is a large manufacturing unit. Recently, the company has conducted the 'time' and 'motion' studies and concluded that on an average a worker could produce 120 units per day. However, it has been noticed that average daily production of a worker is in the range of 80-90 units. Which function of management is needed to ensure that the actual performance is in accordance with the performance as per 'time' and 'motion 'Studies? 4
State any three features of the identified function of management.

29 A software company, Tech Zen, is hiring software developers. After receiving over 500 applications, the HR team conducted a preliminary screening based on qualifications and experience. Shortlisted candidates were then called for a written test assessing their programming skills. Next, they were interviewed by a technical panel. Finally, selected candidates had to go through a medical examination before being issued an appointment letter. 4
Identify the process and briefly explain the stages of the process followed by Tech Zen

OR

Entertainment India Ltd. has been incorporated with the objective of entertaining people by organising festivals, programmes and other similar events depicting the rich cultural heritage of the country. The company management has renowned personalities from the field of art, literature and culture. They decided to give a platform to young budding musicians, poets and artists. The company decided its organisational structure by grouping similar jobs together. Thereafter, the heads of different departments were also appointed. Nisha, one of the heads, did an analysis of the number, type and qualification necessary for people to be appointed. The information generated in the process of writing the job description and the candidate profile was used to develop 'Situations vacant' advertisement. This was published in print media and flashed in electronic media. This brought in a flood of response. Explain the other steps which Nisha has to perform to complete the process being discussed above.

30 Sanjeev Ltd. was engaged in the business of manufacturing electronic component. Its business was expanding due to increased demand for AC. The competition was also increasing. In order to keep its market, share intact, the company directed its workforce to work overtime and also advice to sacrifice personal objective to achieve organitional objectives. But this resulted in many problems. Due to increased pressure of work the efficiency of workers declined. Sometimes, the subordinates had to work for more than one superior. The workers were becoming indiscipline. The spirit of teamwork had begun decline. 4
Identify principles of management (as given by Henry Fayol) which were being violated, quoting the lines from the above case.

31 Identify and explain the elements of directing in the following cases: 6

1. Harihar who is the departmental head of his organisation decides to improve the performance of his department. He decides to give some financial and non-financial incentives to his subordinates. He knows these incentives will satisfy their needs. Therefore, they will be stimulated to take actions from their side.

2. Sanjeev is an HR manager leading a team of 12 people. He knows that the duties and responsibilities of an HR employee are challenging. He knows in order to make his team work with a positive frame of mind, he will have to set a personal example as a role model and influence their behaviour and working style to increase the output of his team.

3. Pritam and Radha are discussing about an element of directing. They say that without this element no group or people can achieve a common understanding. This element requires effort from both the sides and consumes 90% of the time of a manager.

4. Roshan who works at the shop floor is a lower level manager. He is heading a team of 25 workers. He oversees and guides their efforts on a regular basis and tries to maximize the output of his unit by timely giving them feedback. His team has group unity and works with dedication to complete their targets on time.

32 A) State any six reliefs available to a consumer under Consumer Protection Act, 2019. 6

OR

B) State the rights available under Consumer Protection Act, 2019 for the protection and promotion of interest of consumers.

33 Neeraj Gupta started a company 'YoYo Ltd.' with ten employees, to assemble economical computers for the Indian rural market. The company did very well in its initial years. As the product was good and marketed well, the demand went up. To increase production the company decided to recruit additional employees. Neeraj Gupta, who was earlier taking all decisions for the company, had to selectively disperse the authority. He believed that people are competent, capable and resourceful and can assume responsibility for effective implementation of their decisions. This paid off and the company was not only able to increase its production but also expanded its product range with different features. 6

(a) Identify the concept used by Neeraj Gupta through which he was able to steer his company to greater heights.

(b) Explain any five points of importance of this concept.

34 Sunrise Ltd. is planning to expand its operations and requires Rs 20 crore. The Finance Manager suggests raising Rs 15 crore through debt and Rs 5 crore through equity, as interest on debt is tax-deductible. However, the CEO is concerned that excessive use of debt might increase the company's financial risk and reduce flexibility in future financing. 6

Based on the above case, answer the following questions:

1. Identify and define the financial concept discussed in the case.
2. State two advantages of using debt in identified in (a) above.
3. State any three factors the company should consider identified in (a) above case.

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केंद्रीय विद्यालय संगठन,अहमदाबाद संभाग

Kendriya Vidyalaya Sangathan, Ahmedabad Region

कक्षा बारहवीं प्री-बोर्ड II परीक्षा 2025-26 **SET-B**

Pre Board II Examination 2025-26 for Class XII

SUBJECT : ACCOUNTANCY (055)

MM:- 80 **TIME 3 Hours**

GENERAL INSTRUCTIONS:

1. This question paper contains 34 questions. All questions are compulsory.
2. This question paper is divided into two parts, Part A and B.
3. Part - A is compulsory for all candidates.
4. There is no overall choice. However, an internal choice has been provided in 7 questions of one mark, 2 questions of three marks, 1 question of four marks and 2 questions of six marks.

Part A:- Accounting for partnership firms and companies

1 Assertion (A): Each partner carrying on the business of the firm is the principal as well as the agent for all the other partners of the firm. 1

Reason (R): There exists a relationship of mutual agency between all the partners.

Choose the correct option from the following:

(A) Both Assertion (A) and Reason (R) are correct and Reason (R) is the correct explanation of Assertion (A).

(B) Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of Assertion (A).

(C) Assertion (A) is correct, but Reason (R) is incorrect.

(D) Assertion (A) is incorrect, but Reason (R) is correct.

2 X Ltd. purchased machinery worth ₹ 3,00,000 from M Ltd. by issuing 6,000 shares of ₹ 10 each at a premium of ₹ 40 per share. The amount of securities premium will be: 1

A) ₹ 60,000 B) ₹ 2,40,000 C) ₹ 3,00,000 D) ₹ 1,80,000

OR

4,000 shares of ₹ 10 each were forfeited for non-payment of second and final call money of ₹ 2 per share. The minimum amount that the company must collect at the time of reissue of these shares will be :

(A) ₹ 8,000 (B) ₹ 32,000 (C) ₹ 40,000 (D) ₹ 48,000

3 Rima, Seema and Atul were partners in a firm sharing profits and losses in the ratio of 4 : 3 : 1. With effect from 1st April, 2024, they decided to share profits and losses in the ratio of 3 : 1 : 4. Due to change in the profit sharing ratio, Seema's gain or sacrifice will be : 1

(A) Sacrifice 1/8 (B) Sacrifice 2/8 (C) Gain 3/8 (D) Gain 2/8

4 Alligare Ltd. issued 5,000, 9% debentures of ₹ 100 each at ₹ 97 per debenture. The 9% debentures account will be credited by : 1

(A) ₹ 4,85,000 (B) ₹ 5,00,000 (C) ₹ 4,50,000 (D) ₹ 50,000

OR

On 1st April, 2023, Saya Ltd. issued 7,000, 9% debentures of ₹ 100 each at a premium of 10%. The total amount of interest on debentures for the year ending 31st March, 2024 will be :

(A) ₹ 70,000 (B) ₹ 63,000 (C) ₹ 90,000 (D) ₹ 35,000

5 Precious Ltd. issued 40,000 10% Debentures of ₹ 100 each at a premium of 5%, redeemable at a premium of 10%. 'Loss on Issue of Debenture Account' will be debited in the books of Precious Ltd. by : 1

(A) ₹ 5,60,000 (B) ₹ 2,40,000 (C) ₹ 6,00,000 (D) ₹ 4,00,000

6 STATEMENT (I): If the firm has agreed to pay the amount to retiring partner in excess of his adjust capital due its shall be treated as his share of reserve. STATEMENT (II): Retiring partner is entitled to interest on his/her loan @ 6% p.a. If not mentioned in question. 1

(A) Both statements are correct.
(B) Both statements are incorrect.
(C) Statement (I)is correct and statement (II) is incorrect.
(D) Statement (I) is incorrect and statement (II) is incorrect.

OR

Kapil and Larson were partners in a firm sharing profits and losses in the ratio of 5 : 3. Tony was admitted as a new partner for $2/5^{th}$ share in the profits of the firm. Tony was to bring $2/5^{th}$ of the combined capital of Kapil and Larson after all adjustments are carried out. The capitals of Kapil and Larson after all adjustments were ₹ 8,00,000 and ₹ 7,00,000 respectively. The capital brought by Tony was :

(A) ₹ 3,75,000 (B) ₹ 3,00,000 (C) ₹ 6,00,000 (D) ₹ 15,00,000

7 Debentures in respect of which all details including names, addresses and particulars of holding of the debenture holders are entered in a register kept by the company are called: 1

(A) Bearer debentures (B) Redeemable debentures
(C) Registered debentures (D) Secured debentures

8 P and Q are partners in a firm sharing profits and losses equally. They admitted R into the partnership firm on 1st April, 2025. It was decided to value goodwill at 2 years' purchase of super profits. The capital of the firm of P and Q was ₹ 5,00,000 and the normal rate of return on capital employed was 10%. During the year ended 31st March, 2025, the profit of the firm was ₹ 2,10,000. The value of goodwill of the firm was: 1

(A) ₹ 2,50,000 (B) ₹ 1,40,000 (C) ₹ 1,10,000 (D) ₹ 3,20,000

OR

A, B and C were partners in a firm sharing profits and losses in the ratio of 3 : 2 : 1. On 1st April, 2024, D was admitted as a partner in the firm. The new profit sharing ratio was 2 : 2 : 1 : 1. The sacrificed share of A was :

(A) $1/6^{th}$ (B) Nil (C) $3/6^{th}$ (D) $2/6^{th}$

9 A, B and C are partners in a firm sharing profit and losses in 3:4:2 B retire from the firm. The profit on revaluation on that date was ₹ 72,000, New ratio between A and C is 5:3 . Profit on revaluation will be distributed as: 1

(A) A ₹ 32,000 B ₹ 24,000 C ₹ 16,000 (B) A ₹ 24,000 B ₹ 32,000 C ₹ 16,000

(C) A ₹ 45,000 C ₹ 27,000 (D) B ₹ 47,250 C ₹ 24,750

10 Arushi, Vivaan and Mitali were partners in a firm. On 31st March 2024, the firm was dissolved. On that date the firm had debtors of ₹60,000 and provision for doubtful debts of 3,000 were existing in the books. Debtors of ₹ 8,000 proved bad 1

and full amount was realised from the remaining debtors. The amount realised from debtors was:

(A) ₹ 60,000 (B) ₹ 55,000 (C) ₹ 52,000 (D) ₹ 49,000

11 The firm has WCR of ₹10,000. During reconstitution, a provision for liability of ₹ 12,000 is created. What is the accounting treatment? 1

A. Debit ₹ 2,000 to Revaluation A/c B. Credit ₹ 2,000 to Revaluation A/c

C. ₹ 2,000 is distributed among partners D. No adjustment is made

12 In which of the following cases is the business of a firm not dissolved compulsorily? 1

(a) When all but one partner becomes insolvent.
(b) When the business of the firm becomes illegal.
(c) When there is a change in profit sharing ratio between existing partners.
(d) When a partner who is a citizen of a country becomes an alien enemy because of the declaration of war with his country and India.

OR

Pawan, Kavita and Gaurav were partners in a firm. The firm was dissolved. Creditors took over furniture of book value of ₹ 60,000 at 10% less than the book value in part settlement of their amount of ₹ 60,000. The balance amount was paid to them through cheque. The amount paid through cheque will be :

(A) ₹ 5,000 (B) ₹ 6,000 (C) ₹ 54,000 (D) Nil

13 Assertion: C ltd. forfeited 2,000 equity shares of ₹ 10 each on which it had received ₹ 10,000. The company can reissue these forfeited shares at ₹ 4 per share. 1

Reason: Forfeited shares cannot be issued at discount more than the amount received on these shares.

a) Assertion and reason both are incorrect.
b) Assertion and reason both are correct.
c) Assertion is correct but the reason is incorrect.
d) Assertion is incorrect but the reason is correct

14 Tom and Harry were partners in a firm sharing profits and losses in the ratio of 2 : 1. On 1st April, 2024, they admitted Desmond as a new partner for $1/4^{th}$ share in the profits of the firm with a guarantee that his share in the profits shall be at least ₹ 1,00,000. The net profit of the firm for the year ended 31st March, 2025 was 2,80,000. Tom's share in the profits of the firm after giving the guaranteed amount of profit to Desmond will be : 1

(A) ₹ 1,40,000 (B) ₹ 1,20,000 (C) ₹ 1,00,000 (D) ₹ 70,000

Read the following hypothetical situation and answer questions No. 15 and 16 on the basis of the given information:

Aditya and Harsh are partners in a firm sharing profits and losses in the ratio of 3:1. Their capitals were ₹ 1,60,000 and ₹ 1,00,000 respectively. As per partnership deed, they were entitled to interest on capital @ 10% p.a. The firm earned a profit of ₹ 13,000 for the year ended 31st March, 2025.

15 Aditys's interest on capital will be : 1

a) ₹ 5,000 b) ₹ 8,000 C) ₹ 16,000 d) ₹ 10,000

16 Harsh's share of profit/loss will be : 1

a) NIL b) ₹ 9,750 (loss) C) ₹ 3,250 (loss) d) ₹ 9,750 (profit)

17 Aman Ltd. took over the assets of ₹ 15,00,000 and liabilities of ₹ 17,00,000 of Kamini Ltd. for a purchase consideration of ₹ 30,00,000. Aman Ltd. paid 40% of the purchase consideration by cheque and the balance amount by issue of fully paid equity shares of ₹ 100 each at a premium of 50% in favour of Kamini Ltd. Pass necessary journal entries for the above transactions in the books of Aman Ltd. 3

OR

On 01.04.2024, Brain Ltd. purchased from Cayres Ltd., Machinery at ₹ 17,00,000 and Land and Building at ₹ 40,00,000. It also took over its liabilities amounting to ₹ 7,00,000. The purchase consideration of ₹ 60,00,000 was paid as follows:

₹ 5,00,000 through a cheque and the balance by issue of 9% debentures of ₹ 100 each at a premium of 10%.

Pass necessary journal entries for the above transactions in the books of Bain Ltd.

18 A, B and C were partners in a firm with capitals of ₹ 3,00,000, ₹ 2,00,000 and ₹ 1,00,000 respectively. According to the provisions of the partnership deed: 3

(i) A and C were each entitled to a monthly salary of ₹ 1,500.

(ii) B was entitled to a salary of ₹ 4,000 per annum.

The profit for the year ended 31st March, 2025, ₹ 80,000 was divided between the partners in their profit-sharing ratio of 3 : 3 : 2 without providing for the above adjustments. Pass the necessary adjustment entry to rectify the above omissions in the books of the firm.

Show your working notes clearly.

19 Amit and Bina were partners sharing profits in the ratio of 3 : 2. Their capitals were ₹ 50,000 and ₹ 30,000 respectively. Partnership deed provided for interest on capital @ 6% p.a. to Amit and Bina and quarterly salary of ₹ 1,000 to Bina. Amit had given a loan of ₹ 1,00,000 on 1st October, 2024 to the firm without any agreement about interest. For the year 2024-25 the profits earned were ₹ 26,800. Prepare Profit and Loss Appropriation Account of the firm for the year ended 31st March, 2025. 3

20 Abhay and Sonia were partners in a firm. 3

Their capitals were :

Abhay ₹ 3,00,000 and Sonia ₹ 2,00,000.

The normal rate of return in similar business is 10%.

The profits of the firm of Abhay and Sonia for the last three years were :

2022-23 ₹ 60,000, 2023 -24 ₹ 90,000 and 2024- 25 ₹ 1,20,000

Calculate goodwill of the firm on the following basis :

(i) Four years purchase of the average profits for the last three years.

(ii) Capitalisation of super-profits.

21 Shri Ganga Ltd. was registered with an authorised capital of ₹ 7,00,000 divided into equity shares of ₹ 10 each. It offered to the public for subscription 50,000 equity shares. The amount was payable as follows: 4

On application: ₹ 4 per share

On allotment: ₹ 4 per share

On first and final call: Balance

The issue was fully subscribed. All the amounts were duly received except the first and final call money on 4,000 equity shares.

Show the Share Capital in the Balance Sheet of the company as per Schedule III, Part I of Companies Act, 2013. Also prepare "Notes to Accounts" for the same.

22 S, T U were partners in a firm sharing profits and losses in the ratio of 5:6:9. On 31st March, 2025 their Balance Sheet was as follows: 4

Balance sheet of S, T and U as at 31st March, 2025

Liabilities	₹	Assets	₹
Capitals:		Fixed assets	25,00,000
S 13,00,000		Stock	10,00,000
T 12,00,000		Debtors	8,00,000
U 14,00,000	39,00,000	Cash	7,00,000
General reserve	7,00,000	Profit and loss account (2024-25)	2,00,000
Trade payable	6,00,000		
	52,00,000		52,00,000

U died on 30th June, 2025. The partnership deed provided for the following on the death of a partner:

(i) Goodwill of the firm be valued at 3 years purchase of average profits for the last 5 years. The profit/loss for the previous four years were:

2023-24: ₹ 3,10,000 (loss)

2022-23: ₹ 3,00,000 (profit)

2021-22: ₹ 4,00,000 (profit)

2020-21: ₹ 2,50,000 (profit)

(ii) U's share of profit or loss till the date of her death was to be calculated on the basis of profit or loss for the year ended 31st March 2025.

(a) Calculate Goodwill of the firm.

(b) Pass the necessary journal entry for the treatment of goodwill on U's death.

(c) Calculate U's share in the profit or loss of the firm till the date of her death.

(d) Pass the necessary journal entry to record U's share of profit or loss till the date of her death.

23 On 1st April, 2024, Marvel Ltd. issued 2,000, 7% Debentures of ₹ 500 each at a premium of 10%, redeemable at a premium of 10% after five years. The company had a balance of ₹ 1,75,000 in Securities Premium Account before the issue. 6

(a) Pass journal entries for issue of debentures and for writing off Loss on utilising Securities Premium Account at the end of the first year itself.

(b) Prepare Loss on Issue of Debentures Account for the year ended 31st March, 2025.

24 Aman and Shradha were partners in a firm sharing profits and losses in the ratio of 3 : 2. On 31st March, 2025 their Balance Sheet was as follows : 6

Balance Sheet of Aman and Shraddha as At 31st March 2025

Liabilities	Amount ₹	Assets	Amount ₹
Creditors	90,000	Cash at Bank	20,000
Mrs. Aman loan	30,000	Stock	24,000
Shraddha's loan	30,000	Investments	30,000
General Reserve	45,000	Debtors 20,000 Less : provision for Bad debts 2,000	18,000
Capitals:		Plant	1,00,000
Aman 1,00,000 Shraddha 97,000	1,97,000	Advertisement suspense account	2,00,000
	3,92,000		3,92,000

The firm was dissolved on 31st March, 2025 on the following terms:

(i) Debtors realised ₹ 17,000 and plant realised 10% more than the book value.

(ii) Aman promised to pay Mrs. Aman's loan and took away stock at ₹ 20,000.

(iii) Shraddha took away half of the investments at a discount of 10%. Remaining investments realised ₹ 4,500.

(iv) Creditors were paid off at a discount of 10%.

(v) Expenses of realisation amounted to ₹ 7,000.

Prepare Realisation Account.

25 Kishore and Ranjan were partners in a firm sharing profits and losses in the ratio of 3 : 2. On 1st April, 2025, their Balance Sheet was as follows : 6

Balance Sheet of Kishore and Ranjan as at 1st April, 2025

Liabilities	₹	Assets	₹
Sundry creditors	1,80,000	Cash in hand	30,000
General Reserve	20,000	Debtors	1,20,000
Capitals		Stock	1,50,000
Kishore 6,00,000		Furniture	1,00,000
Ranjan 4,00,000	10,00,000	Land & Building	8,00,000
	12,00,000		12,00,000

On the above date, Singh was admitted as a new partner on the following terms :

(i) Singh will bring ₹ 1,50,000 as his capital and ₹ 50,000 as his share of goodwill premium.

(ii) The value of stock will be reduced by 10% and Land and Building will be appreciated by 10%.

(iii) Furniture will be revalued at ₹ 90,000.

(iv) A provision for doubtful debts will be created on sundry debtors at 5%.

(v) Investments worth ₹ 10,000 not mentioned in the Balance Sheet will be taken into account.

(vi) A creditor of ₹ 1,000 is not likely to claim his money and is to be written off.

Pass necessary journal entries for the above transactions in the books of the firm on Singh's admission.

OR

Rohit, Manav and Avni were partners in a firm sharing profits and losses in the ratio of 3:1:1. Their Balance sheet as at 31st March, 2024 was as follows:

BALANCE SHEET OF Rohit, Manav and Avni as at 31st March 2025

Liabilities	₹	**Assets**	₹
Capital A/cs		Furniture	4,60,000
Rohit 4,00,000		Investment	2,00,000
Manav 3,00,000		Stock	2,40,000
Avni 2,00,000	9,00,000	Debtors 2,20,000 Less: Prov. for Doubtful Debts: 10,000	2,10,000
Investment Fluctuation Fund	1,10,000	Cash	1,50,000
Creditors	2,50,000		
	12,60,000		12,60,000

Manav retired on 1st April 2024. It was agreed that:

(i) Stock was to be appreciated by 20%FF

(ii) Provision for Doubtful Debts was to be increased to ₹ 15,000

(iii) Value of furniture was to be reduced by ₹ 3,000

(iv) Market value of investment was ₹ 1,90,000

(v) Goodwill of the firm was valued at ₹ 2,00,000 and Manav's share was adjusted in the accounts of R and A.

(vi) Manav was paid ₹ 68,000 in the cash and the balance was transferred to his loan account.

(vii) Capitals of Rohit and Avni were to be in proportion to their new profit- sharing ratio. Surplus/deficit, if any, in their capital accounts was to be adjusted through Current Accounts.

Prepare Revaluation Account and Partners' Capital Accounts.

26 Yash Ltd. invited applications for 50,000 equity shares of ₹ 3 per share; on allotment (including premium) ₹ 3 per share and on first and final call, the balance amount. 6

Applications were received for 1,20,000 shares and shares were allotted on pro-rata basis to all applicants. The excess money received on application was to be adjusted towards sums due on allotment. Application money in excess of sums due on allotment was refunded. A shareholder who applied for 6,000 shares could not pay the first and final call money and his shares were forfeited. The forfeited shares were reissued for ₹ 60,000 fully paid up.

Pass necessary journal entries for the above transactions in the books of Yash Ltd.

OR

Lotus Ltd. invited applications for issuing 80,000 equity shares of ₹ 10 each at a premium of ₹ 4 per share. The amount was payable as follows :

On application ₹ 5 per share and

On allotment ₹ 9 per share (included premium).

Applications were received for 1,40,000 shares and allotment was made to all applicants on pro-rata basis. Money overpaid on applications was adjusted towards sums due on allotment. Rajiv, who had applied for 1,400 shares, failed to pay the

allotment money. His shares were forfeited. Later on, these forfeited shares were reissued at ₹ 9 per share as fully paid up. Pass necessary journal entries for the above transactions in the books of Lotus Ltd.

Part B:- Analysis of Financial Statements

27 Which of the following transactions will result in flow of cash? 1

a) Cash withdrawn from bank ₹ 71,000.

b) Issue of 9% debentures of ₹ 1,00,000 to the vendors of machinery.

c) Received from debtors ₹ 74,000.

d) redeemed 10 % debentures by converting into equity shares.

28 Paid ₹ 5,00,000 to acquire shares in Neligare Industries and received a dividend of ₹ 30,000 after acquisition. 1

(A) Cash outflow from financing activities ₹ 4,70,000

(B) Cash inflow from investing activities ₹ 4,70,000

(C) Cash inflow from financing activities ₹ 4,70,000

(D) Cash outflow from investing activities ₹ 4,70,000

29 The tool of " Analysis of Financial Statements" which helps to assess the profitability, solvency and efficiency of an enterprise is known as: 1

a) Cash flow statement b) Comparative statement

c) Common size statement d) Ratio analysis

OR

……..indicates the speed at which activities of the business are being performed.

a) Liquidity ratios b) Turnover ratios

c) Solvency ratios d) Profitability ratios

30 Analysis of Financial Statements is useful and significant to different users. Which of the following users is particularly interested in firm's ability to meet claims over a very short period of time? 1

(A) Labour Unions (B) Trade Payables

(C) Top Management (D) Finance Manager

OR

Assertion (A): Contingent Liabilities are not the liabilities payable yet but may become liabilities when an event associated with it happens in future.

Reason(R): Proposed Dividend is a contingent Liability because it will become a liability after the shareholders declare, i.e., approve it .

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

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

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

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

31 Name the major heads and sub-heads (if any) under which the following items will be shown in the Balance Sheet of a company as per Schedule III, Part I of the Companies Act, 2013 : 3

a) Unclaimed dividend

b) Accrued income

c) Current maturities of long term debts
d) Employee's earned leave payable on retirement
e) Advance paid to contractor for building under construction
f) Provision for tax

32 From the following information, prepare a Comparative Statement of Profit and Loss for the year ended 31st March, 2024 and 2025 : 3

Particulars	Note no.	2024-25	2023-24
Revenue from operations		50,00,000	40,00,000
Employee benefit expenses		7,50,000	5,00,000
Other expenses		22,50,000	20,00,000
Tax rate 50 %			

OR

Prepare a Common Size Balance Sheet of ZXT Ltd. from the following information

Particulars	Note no.	2024-25	2023-24
I-Equity and Liabilities:			
1. Shareholders' Funds			
Share Capital		30,00,000	10,00,000
2. Non-Current Liabilities			
Long-term Borrowings		16,00,000	8,00,000
3. Current Liabilities		4,00,000	2,00,000
Total		50,00,000	20,00,000
II- Assets:			
1. Non-Current Assets			
Property, Plant and Equipment and Intangible assets Property, Plant and Equipment		30,00,000	14,00,000
2. Current Assets			
Inventory		20,00,000	6,00,000
Total		50,00,000	20,00,000

33 From the following information, calculate Working Capital Turnover Ratio : 4

Capital Employed ₹ 1,00,000

Non-Current Assets ₹ 80,000

Cost of Revenue from Operations ₹ 3,20,000

Gross Profit Ratio 20%

OR

Calculate Gross Profit Ratio from the following information :
Inventory Turnover Ratio : 6 times

Average Inventory : ₹ 4,00,000

Goods are sold at a profit of 25% on cost

34 From the following Balance Sheet of Bose Ltd. as at 31st March, 2025, calculate Cash Flow from operating activities:- Balance Sheet of Josh Ltd. As at 31st March, 2025. 6

Notes to Accounts:-

Particulars	Note no.	31.03.2025	31.03.2024
I-Equity and Liabilities:			
1. Shareholders' Funds			
a) Share Capital		37,00,000	25,00,000
b) Reserves and surplus	1	5,00,000	12,00,000
2. Non-Current Liabilities			
Long-term Borrowings	2	20,00,000	18,00,000
3. Current Liabilities			
a) short term borrowings		6,00,000	5,50,000
b) Trade payable		5,00,000	3,50,000
Total		73,00,000	64,00,000
II- Assets:			
1. Non-Current Assets			
a) Property, Plant and Equipment and Intangible assets			
i) Property, Plant and Equipment	3	45,00,000	41,00,000
ii) intangible assets	4	3,00,000	5,00,000
2. Current Assets			
a) current investments		5,00,000	2,00,000
b) Inventory		8,00,000	10,00,000
c) trade receivable		10,00,000	2,00,000
d) cash and cash equivalents		2,00,000	4,00,000
Total		73,00,000	64,00,000

1	Reserves and Surplus (i.e. Balance in the Statement of Profit and Loss)	5,00,000	12,00,000
2	Long Term Borrowings : 10% Debentures	20,00,000	18,00,000
3	Property, Plant and Equipment:- Plant and Machinery	50,00,000	44,00,000
	Less : Accumulated Depreciation	5,00,000	3,00,000
		45,00,000	41,00,000
4	Intangible Assets: Goodwill	3,00,000	5,00,000

Additional Information :

(i) A piece of machinery costing ₹ 4,00,000 on which accumulated depreciation was ₹ 3,00,000 was sold at a loss of ₹ 70,000.

(ii) 10% Debentures of ₹ 2,00,000 were issued on 31.3.2025.

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केंद्रीय विद्यालय संगठन,अहमदाबाद संभाग

Kendriya Vidyalaya Sangathan, Ahmedabad Region

कक्षा बारहवीं प्री-बोर्ड II परीक्षा 2025-26 SET-A

Pre Board II Examination 2025-26 for Class XII

SUBJECT : ACCOUNTANCY (055)

MM:- 80 **TIME 3 Hours**

GENERAL INSTRUCTIONS:

1. This question paper contains 34 questions. All questions are compulsory.
2. This question paper is divided into two parts, Part A and B.
3. Part - A is compulsory for all candidates.
4. There is no overall choice. However, an internal choice has been provided in 7 questions of one mark, 2 questions of three marks, 1 question of four marks and 2 questions of six marks.

Part A:- Accounting for partnership firms and companies

1 There are two statements Assertion (A) and Reason (R) : 1

Assertion (A) : The partner's fixed capital accounts always show credit balance, which shall remain the same (fixed) year after year unless there is any addition or withdrawal of capital.

Reason (R) : When capitals are fixed, then various items like share of profit or loss, interest on capital, drawings, interest on drawings etc. are recorded in partner's fixed capital accounts.

Choose the correct option from the following:

a) Both Assertion (A) and Reason (R) are correct and Reason (R) is the correct explanation of Assertion (A).
b) Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of Assertion (A).
c) Assertion (A) is correct, but Reason (R) is incorrect.
d) Assertion (A) is incorrect, but Reason (R) is correct.

2 X Ltd. purchased machinery worth ₹ 3,00,000 from M Ltd. by issuing 6,000 shares of ₹ 10 each at a premium of ₹ 40 per share. The amount of securities premium will be: 1

A) ₹ 60,000 B) ₹ 2,40,000 C) ₹ 3,00,000 D) ₹ 1,80,000

OR

4,000 shares of ₹ 10 each were forfeited for non-payment of second and final call money of ₹ 2 per share. The minimum amount that the company must collect at the time of reissue of these shares will be :

(A) ₹ 8,000 (B) ₹ 32,000 (C) ₹ 40,000 (D) ₹ 48,000

3 Rima, Seema and Atul were partners in a firm sharing profits and losses in the ratio of 4 : 3 : 1. With effect from 1st April, 2024, they decided to share profits and losses in the ratio of 3 : 1 : 4. Due to change in the profit sharing ratio, Seema's gain or sacrifice will be : 1

(A) Sacrifice 1/8 (B) Sacrifice 2/8 (C) Gain 3/8 (D) Gain 2/8

4 The firm has WCR of ₹ 10,000. During reconstitution, a provision for liability of ₹ 12,000 is created. What is the accounting treatment? 1

A. Debit ₹ 2,000 to Revaluation A/c B. Credit ₹ 2,000 to Revaluation A/c

C. ₹ 2,000 is distributed among partners D. No adjustment is made

5 In which of the following cases is the business of a firm not dissolved compulsorily? 1
(a) When all but one partner becomes insolvent.
(b) When the business of the firm becomes illegal.
(c) When there is a change in profit sharing ratio between existing partners.
(d) When a partner who is a citizen of a country becomes an alien enemy because of the declaration of war with his country and India.

OR

Pawan, Kavita and Gaurav were partners in a firm. The firm was dissolved. Creditors took over furniture of book value of ₹ 60,000 at 10% less than the book value in part settlement of their amount of ₹ 60,000. The balance amount was paid to them through cheque. The amount paid through cheque will be :
(A) ₹ 5,000 (C) ₹ 54,000 (B) ₹ 6,000 (D) Nil

6 Assertion: C ltd. forfeited 2,000 equity shares of ₹ 10 each on which it had received ₹ 10,000. The company can reissue these forfeited shares at ₹ 4 per share. 1
Reason: Forfeited shares cannot be issued at discount more than the amount received on these shares.
a) Assertion and reason both are incorrect.
b) Assertion and reason both are correct.
c) Assertion is correct but the reason is incorrect.
d) Assertion is incorrect but the reason is correct

7 Debentures in respect of which all details including names, addresses and particulars of holding of the debenture holders are entered in a register kept by the company are called: 1
(A) Bearer debentures (B) Redeemable debentures
(C) Registered debentures (D) Secured debentures

8 P and Q are partners in a firm sharing profits and losses equally. They admitted R into the partnership firm on 1st April, 2025. It was decided to value goodwill at 2 years' purchase of super profits. The capital of the firm of P and Q was ₹ 5,00,000 and the normal rate of return on capital employed was 10%. During the year ended 31st March, 2025, the profit of the firm was ₹ 2,10,000. The value of goodwill of the firm was: 1
(A) ₹ 2,50,000 (B) ₹ 1,40,000 (C) ₹ 1,10,000 (D) ₹ 3,20,000

OR

A, B and C were partners in a firm sharing profits and losses in the ratio of 3 : 2 : 1. On 1st April, 2024, D was admitted as a partner in the firm. The new profit sharing ratio was 2 : 2 : 1 : 1. The sacrificed share of A was :
(A) $1/6^{th}$ (B) Nil (C) $3/6^{th}$ (D) $2/6^{th}$

9 A, B and C are partners in a firm sharing profit and losses in 3:4:2 B retire from the firm. The profit on revaluation on that date was ₹ 72,000, New ratio between A and C is 5:3 . Profit on revaluation will be distributed as: 1
(A) A ₹ 32,000 B ₹ 24,000 C ₹ 16,000
(B) A ₹ 24,000 B ₹ 32,000 C ₹ 16,000
(C) A ₹ 45,000 C ₹ 27,000
(D) B ₹ 47,250 C ₹ 24,750

10 At the time of dissolution Machinery appears at ₹ 10,00,000 and accumulated depreciation for the machinery appears at ₹ 6,00,000 in the balance sheet of a firm. This machine is taken over by a creditor of ₹ 5,40,000 at 5% below the net value. The balance amount of the creditor was paid through bank. By what amount should the bank account be credited for this transaction? 1

A. ₹ 60,000. B. ₹ 1,60,000. C. ₹ 5,40,000. D. ₹ 4,00,000.

11 STATEMENT (I): If the firm has agreed to pay the amount to retiring partner in excess of his adjust capital due its shall be treated as his share of reserve. STATEMENT (II): Retiring partner is entitled to interest on his/her loan @ 6% p.a. If not mentioned in question. 1

(A) Both statements are correct.
(B) Both statements are incorrect.
(C) Statement (I)is correct and statement (II) is incorrect.
(D) Statement (I) is incorrect and statement (II) is incorrect.

OR

Kapil and Larson were partners in a firm sharing profits and losses in the ratio of 5 : 3. Tony was admitted as a new partner for $2/5^{th}$ share in the profits of the firm. Tony was to bring $2/5^{th}$ of the combined capital of Kapil and Larson after all adjustments are carried out. The capitals of Kapil and Larson after all adjustments were ₹ 8,00,000 and ₹ 7,00,000 respectively. The capital brought by Tony was :

(A) ₹ 3,75,000 (B) ₹ 3,00,000 (C) ₹ 6,00,000 (D) ₹ 15,00,000

12 Alligare Ltd. issued 5,000, 9% debentures of ₹ 100 each at ₹ 97 per debenture. The 9% debentures account will be credited by : 1

(A) ₹ 4,85,000 (B) ₹ 5,00,000 (C) ₹ 4,50,000 (D) ₹ 50,000

OR

On 1st April, 2023, Saya Ltd. issued 7,000, 9% debentures of ₹ 100 each at a premium of 10%. The total amount of interest on debentures for the year ending 31st March, 2024 will be :

(A) ₹ 70,000 (B) ₹ 63,000 (C) ₹ 90,000 (D) ₹ 35,000

13 Precious Ltd. issued 40,000 10% Debentures of ₹ 100 each at a premium of 5%, redeemable at a premium of 10%. 'Loss on Issue of Debenture Account' will be debited in the books of Precious Ltd. by : 1

(A) ₹ 5,60,000 (B) ₹ 2,40,000 (C) ₹ 6,00,000 (D) ₹ 4,00,000

14 S and T were partners in a firm sharing profits and losses in the ratio of 3:2. They admitted U as a new partner in the firm. On U's admission there existed a provision for bad and doubtful debts of ₹ 7,000. It was decided to write off ₹ 3,000 as bad debts. The remaining debtors were considered as good. The amount to be debited/credited to Revaluation Account on account of the above treatment will be: 1

(a) Debit ₹ 3,000 (b) Credit ₹ 4,000

(c) Debit ₹ 7,000 (d) Debit ₹ 4,000

Read the following hypothetical situation and answer questions No. 15 and 16 on the basis of the given information:

Aditya and Harsh are partners in a firm sharing profits and losses in the ratio of 3:1. Their capitals were ₹ 1,60,000 and ₹ 1,00,000 respectively. As per partnership deed, they were entitled to interest on capital @ 10% p.a. The firm earned a profit of ₹ 13,000 for the year ended 31st March, 2025.

15 Aditys's interest on capital will be : 1

a) ₹ 5,000 b) ₹ 8,000 C) ₹ 16,000 d) ₹ 10,000

16 Harsh's share of profit/loss will be : 1

a) NIL b) ₹ 9,750 (loss)

C) ₹ 3,250 (loss) d) ₹ 9,750 (profit)

17 Aman Ltd. took over the assets of ₹ 15,00,000 and liabilities of ₹ 17,00,000 of Kamini Ltd. for a purchase consideration of ₹ 30,00,000. Aman Ltd. paid 40% of the purchase consideration by cheque and the balance amount by issue of fully paid equity shares of ₹ 100 each at a premium of 50% in favour of Kamini Ltd. Pass necessary journal entries for the above transactions in the books of Aman Ltd. 3

OR

On 01.04.2024, Brain Ltd. purchased from Cayres Ltd., Machinery at ₹ 17,00,000 and Land and Building at ₹ 40,00,000. It also took over its liabilities amounting to ₹ 7,00,000. The purchase consideration of ₹ 60,00,000 was paid as follows:

₹ 5,00,000 through a cheque and the balance by issue of 9% debentures of ₹ 100 each at a premium of 10%.

Pass necessary journal entries for the above transactions in the books of Bain Ltd.

18 A, B and C were partners in a firm with capitals of ₹ 3,00,000, ₹ 2,00,000 and ₹ 1,00,000 respectively. According to the provisions of the partnership deed: 3

(i) A and C were each entitled to a monthly salary of ₹ 1,500.

(ii) B was entitled to a salary of ₹ 4,000 per annum.

The profit for the year ended 31st March, 2025, ₹ 80,000 was divided between the partners in their profit-sharing ratio of 3 : 3 : 2 without providing for the above adjustments. Pass the necessary adjustment entry to rectify the above omissions in the books of the firm.

Show your working notes clearly.

19 Amit and Bina were partners sharing profits in the ratio of 3 : 2. Their capitals were ₹ 50,000 and ₹ 30,000 respectively. Partnership deed provided for interest on capital @ 6% p.a. to Amit and Bina and quarterly salary of ₹ 1,000 to Bina. Amit had given a loan of ₹ 1,00,000 on 1st October, 2024 to the firm without any agreement about interest. For the year 2024-25 the profits earned were ₹ 26,800. Prepare Profit and Loss Appropriation Account of the firm for the year ended 31st March, 2025. 3

20 Abhay and Sonia were partners in a firm. 3

Their capitals were :

Abhay ₹ 3,00,000 and Sonia ₹ 2,00,000.

The normal rate of return in similar business is 10%.

The profits of the firm of Abhay and Sonia for the last three years were :

2022-23 ₹ 60,000, 2023 -24 ₹ 90,000 and 2024- 25 ₹ 1,20,000

Calculate goodwill of the firm on the following basis :

(i) Four years purchase of the average profits for the last three years.

(ii) Capitalisation of super-profits.

21 Shri Ganga Ltd. was registered with an authorised capital of ₹ 7,00,000 divided into equity shares of ₹ 10 each. It offered to the public for subscription 50,000 equity shares. The amount was payable as follows: 4

On application: v 4 per share

On allotment: ₹ 4 per share

On first and final call: Balance

The issue was fully subscribed. All the amounts were duly received except the first and final call money on 4,000 equity shares.

Show the Share Capital in the Balance Sheet of the company as per Schedule III, Part I of Companies Act, 2013. Also prepare "Notes to Accounts" for the same.

22 S, T U were partners in a firm sharing profits and losses in the ratio of 5:6:9. On 31st March, 2025 their Balance Sheet was as follows: 4

Balance sheet of S, T and U as at 31st March, 2025

Liabilities	₹	Assets	₹
Capitals:		Fixed assets	25,00,000
S 13,00,000		Stock	10,00,000
T 12,00,000		Debtors	8,00,000
U 14,00,000	39,00,000	Cash	7,00,000
General reserve	7,00,000	Profit and loss account (2024-25)	2,00,000
Trade payable	6,00,000		
	52,00,000		52,00,000

U died on 30th June, 2025. The partnership deed provided for the following on the death of a partner:

(i) Goodwill of the firm be valued at 3 years purchase of average profits for the last 5 years. The profit/loss for the previous four years were:

2023-24: ₹ 3,10,000 (loss)

2022-23: ₹ 3,00,000 (profit)

2021-22: ₹ 4,00,000 (profit)

2020-21: ₹ 2,50,000 (profit)

(ii) U's share of profit or loss till the date of her death was to be calculated on the basis of profit or loss for the year ended 31st March 2025.

(a) Calculate Goodwill of the firm.

(b) Pass the necessary journal entry for the treatment of goodwill on U's death.

(c) Calculate U's share in the profit or loss of the firm till the date of her death.
(d) Pass the necessary journal entry to record U's share of profit or loss till the date of her death

23 On 1st April, 2024, Marvel Ltd. issued 2,000, 7% Debentures of ₹ 500 each at a premium of 10%, redeemable at a premium of 10% after five years. The company had a balance of ₹ 1,75,000 in Securities Premium Account before the issue. 6

(a) Pass journal entries for issue of debentures and for writing off Loss on utilising Securities Premium Account at the end of the first year itself.
(b) Prepare Loss on Issue of Debentures Account for the year ended 31st March, 2025.

24 Aman and Shradha were partners in a firm sharing profits and losses in the ratio of 3 : 2. On 31st March, 2025 their Balance Sheet was as follows : 6

Balance Sheet of Aman and Shraddha as At 31st March 2025

Liabilities	Amount ₹	Assets	Amount ₹
Creditors	90,000	Cash at Bank	20,000
Mrs. Aman loan	30,000	Stock	24,000
Shraddha's loan	30,000	Investments	30,000
General Reserve	45,000	Debtors 20,000 Less : provision for Bad debts 2,000	18,000
Capitals:		Plant	1,00,000
Aman 1,00,000 Shraddha 97,000	1,97,000	Advertisement suspense account	2,00,000
	3,92,000		3,92,000

The firm was dissolved on 31st March, 2025 on the following terms:

(i) Debtors realised ₹ 17,000 and plant realised 10% more than the book value.

(ii) Aman promised to pay Mrs. Aman's loan and took away stock at ₹ 20,000.

(iii) Shraddha took away half of the investments at a discount of 10%. Remaining investments realised ₹ 4,500.

(iv) Creditors were paid off at a discount of 10%.

(v) Expenses of realisation amounted to ₹ 7,000.

Prepare Realisation Account.

25 Kishore and Ranjan were partners in a firm sharing profits and losses in the ratio of 3 : 2. On 1st April, 2025, their Balance Sheet was as follows : 6

Balance Sheet of Kishore and Ranjan as at 1st April, 2025

Liabilities	₹	Assets	₹
Sundry creditors	1,80,000	Cash in hand	30,000
General Reserve	20,000	Debtors	1,20,000
Capitals		Stock	1,50,000
Kishore 6,00,000		Furniture	1,00,000
Ranjan 4,00,000	10,00,000	Land & Building	8,00,000
	12,00,000		12,00,000

On the above date, Singh was admitted as a new partner on the following terms :

(i) Singh will bring ₹ 1,50,000 as his capital and ₹ 50,000 as his share of goodwill premium.

(ii) The value of stock will be reduced by 10% and Land and Building will be appreciated by 10%.

(iii) Furniture will be revalued at ₹ 90,000.

(iv) A provision for doubtful debts will be created on sundry debtors at 5%.

(v) Investments worth ₹ 10,000 not mentioned in the Balance Sheet will be taken into account.

(vi) A creditor of ₹ 1,000 is not likely to claim his money and is to be written off.

Pass necessary journal entries for the above transactions in the books of the firm on Singh's admission.

OR

Rohit, Manav and Avni were partners in a firm sharing profits and losses in the ratio of 3:1:1. Their Balance sheet as at 31st March, 2024 was as follows:

BALANCE SHEET OF Rohit, Manav and Avni as at 31st March 2025

Liabilities	₹	**Assets**	₹
Capital A/cs		Furniture	4,60,000
Rohit 4,00,000		Investment	2,00,000
Manav 3,00,000		Stock	2,40,000
Avni 2,00,000	9,00,000	Debtors 2,20,000 Less: Prov. for Doubtful Debts: 10,000	2,10,000
Investment Fluctuation Fund	1,10,000	Cash	1,50,000
Creditors	2,50,000		
	12,60,000		12,60,000

Manav retired on 1st April 2025. It was agreed that:

(i) Stock was to be appreciated by 20%FF

(ii) Provision for Doubtful Debts was to be increased to ₹ 15,000

(iii) Value of furniture was to be reduced by ₹ 3,000

(iv) Market value of investment was ₹ 1,90,000

(v) Goodwill of the firm was valued at ₹ 2,00,000 and Manav's share was adjusted in the accounts of R and A.

(vi) Manav was paid ₹ 68,000 in the cash and the balance was transferred to his loan account.

(vii) Capitals of Rohit and Avni were to be in proportion to their new profit- sharing ratio. Surplus/deficit, if any, in their capital accounts was to be adjusted through Current Accounts.

Prepare Revaluation Account and Partners' Capital Accounts.

26 Yash Ltd. invited applications for 50,000 equity shares of ₹ 3 per share; on allotment (including premium) ₹ 3 per share and on first and final call, the balance amount. Applications were received for 1,20,000 shares and shares were allotted on pro-rata basis to all applicants. The excess money received on application was to be adjusted towards sums due on allotment. Application money in excess of sums due on 6

allotment was refunded. A shareholder who applied for 6,000 shares could not pay the first and final call money and his shares were forfeited. The forfeited shares were reissued for ₹ 60,000 fully paid up.

Pass necessary journal entries for the above transactions in the books of Yash Ltd.

OR

Lotus Ltd. invited applications for issuing 80,000 equity shares of ₹ 10 each at a premium of ₹ 4 per share. The amount was payable as follows :

On application ₹ 5 per share and

On allotment ₹ 9 per share (included premium).

Applications were received for 1,40,000 shares and allotment was made to all applicants on pro-rata basis. Money overpaid on applications was adjusted towards sums due on allotment. Rajiv, who had applied for 1,400 shares, failed to pay the allotment money. His shares were forfeited. Later on, these forfeited shares were reissued at ₹ 9 per share as fully paid up. Pass necessary journal entries for the above transactions in the books of Lotus Ltd.

Part B:- Analysis of Financial Statements

27 The tool of " Analysis of Financial Statements" which helps to assess the profitability, solvency and efficiency of an enterprise is known as: 1

a) Cash flow statement b) Comparative statement

c) Common size statement d) Ratio analysis

OR

……..indicates the speed at which activities of the business are being performed.

a) Liquidity ratios b) Turnover ratios

c) Solvency ratios d) Profitability ratios

28 Paid ₹ 5,00,000 to acquire shares in Neligare Industries and received a dividend of ₹ 30,000 after acquisition. 1

(A) Cash outflow from financing activities ₹ 4,70,000

(B) Cash inflow from investing activities ₹ 4,70,000

(C) Cash inflow from financing activities ₹ 4,70,000

(D) Cash outflow from investing activities ₹ 4,70,000

29 Which of the following transactions will result in flow of cash? 1

a) Cash withdrawn from bank ₹ 71,000.

b) Issue of 9% debentures of ₹ 1,00,000 to the vendors of machinery.

c) Received from debtors ₹ 74,000.

d) redeemed 10 % debentures by converting into equity shares.

30 Analysis of Financial Statements is useful and significant to different users. Which of the following users is particularly interested in firm's ability to meet claims over a very short period of time? 1

(A) Labour Unions (B) Trade Payables (C) Top Management (D) Finance Manager

OR

Assertion (A): Contingent Liabilities are not the liabilities payable yet but may become liabilities when an event associated with it happens in future.

Reason(R): Proposed Dividend is a contingent Liability because it will become a liability after the shareholders declare, i.e., approve it .

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

31 Name the major heads and sub-heads (if any) under which the following items will be shown in the Balance Sheet of a company as per Schedule III, Part I of the Companies Act, 2013 : 3

a) Unclaimed dividend
b) Accrued income
c) Current maturities of long term debts
d) Employee's earned leave payable on retirement
e) Advance paid to contractor for building under construction
f) Provision for tax

32 From the following information, prepare a Comparative Statement of Profit and Loss for the year ended 31st March, 2024 and 2025 : 3

Particulars	Note no.	2024-25	2023-24
Revenue from operations		50,00,000	40,00,000
Employee benefit expenses		7,50,000	5,00,000
Other expenses		22,50,000	20,00,000
Tax rate 50 %			

OR

Prepare a Common Size Balance Sheet of ZXT Ltd. from the following information

Particulars	Note no.	2024-25	2023-24
I-Equity and Liabilities:			
1. Shareholders' Funds			
Share Capital		30,00,000	10,00,000
2. Non-Current Liabilities			
Long-term Borrowings		16,00,000	8,00,000
3. Current Liabilities		4,00,000	2,00,000
Total		50,00,000	20,00,000
II- Assets:			
1. Non-Current Assets			
Property, Plant and Equipment and Intangible assets Property, Plant and Equipment		30,00,000	14,00,000
2. Current Assets			
Inventory		20,00,000	6,00,000
Total		50,00,000	20,00,000

33 From the following information, calculate Working Capital Turnover Ratio : 4

Capital Employed ₹ 1,00,000

Non-Current Assets ₹ 80,000

Cost of Revenue from Operations ₹ 3,20,000

Gross Profit Ratio 20%

OR

Calculate Gross Profit Ratio from the following information :

Inventory Turnover Ratio : 6 times

Average Inventory : ₹ 4,00,000

Goods are sold at a profit of 25% on cost

34 From the following Balance Sheet of Bose Ltd. as at 31st March, 2025, calculate Cash Flow from operating activities:- 6

Balance Sheet of Josh Ltd. As at 31st March, 2025.

Notes to Accounts:-

Particulars	Note no.	31.03.2025	31.03.2024
I-Equity and Liabilities:			
1. Shareholders' Funds			
a) Share Capital		37,00,000	25,00,000
b) Reserves and surplus	1	5,00,000	12,00,000
2. Non-Current Liabilities			
Long-term Borrowings	2	20,00,000	18,00,000
3. Current Liabilities			
a) short term borrowings		6,00,000	5,50,000
b) Trade payable		5,00,000	3,50,000
Total		73,00,000	64,00,000
II- Assets:			
1. Non-Current Assets			
a) Property, Plant and Equipment and Intangible assets			
i) Property, Plant and Equipment	3	45,00,000	41,00,000
ii) intangible assets	4	3,00,000	5,00,000
2. Current Assets			
a) current investments		5,00,000	2,00,000
b) Inventory		8,00,000	10,00,000
c) trade receivable		10,00,000	2,00,000
d) cash and cash equivalents		2,00,000	4,00,000
Total		73,00,000	64,00,000

Note no.	Particulars	31.03.2025	31.03.2024
1	Reserves and Surplus (i.e. Balance in the Statement of Profit and Loss)	5,00,000	12,00,000
2	Long Term Borrowings : 10% Debentures	20,00,000	18,00,000
3	Property, Plant and Equipment:- Plant and Machinery	50,00,000	44,00,000
	Less : Accumulated Depreciation	5,00,000	3,00,000
		45,00,000	41,00,000
4	Intangible Assets: Goodwill	3,00,000	5,00,000

Additional Information :

(i) A piece of machinery costing ₹ 4,00,000 on which accumulated depreciation was ₹ 3,00,000 was sold at a loss of ₹ 70,000.

(ii) 10% Debentures of ₹ 2,00,000 were issued on 31.3.2025.

केंद्रीय विद्यालय संगठन,अहमदाबाद संभाग

Kendriya Vidyalaya Sangathan, Ahmedabad Region

कक्षा बारहवीं प्री-बोर्ड II परीक्षा 2025-26

Pre Board II Examination 2025-26 for Class XII

Subject: Informatics Practices (065) (SET B)

TIME: 03 HOURS **M.M.: 70**

General Instructions:

- All questions are compulsory.
- The examination paper contains five sections, from Section A to Section E.
- Section A consists of 21 questions (1 to 21). Each question carries 1 Mark.
- Section B consists of 7 questions (22 to 28). Each question carries 2 Marks.
- Section C consists of 4 questions (29 to 32). Each question carries 3 Marks.
- Section D consists of 2 questions (33 to 34). Each question carries 4 Marks.
- Section E consists of 3 questions (35 to 37). Each question carries 5 Marks.
- There is no overall choice. However, internal choices have been provided in some questions. Attempt only one of the choices in such questions.
- All programming questions are to be answered using Python Language only.
- In case of MCQ, text of the correct answer should also be written.

SECTION - A

1 A company's table **EMPLOYEE** has the columns DEPT and SALARY. 1
To find the average salary **department-wise**, which query is correct?

a) SELECT AVG(SALARY), DEPT FROM EMPLOYEE ORDER BY DEPT;
b) SELECT AVG(SALARY) GROUP BY DEPT;
c) SELECT DEPT, AVG(SALARY) FROM EMPLOYEE GROUP BY DEPT;
d) SELECT AVG(SALARY) FROM EMPLOYEE ORDER BY DEPT;

2 Which topology is **least expensive** to install for small networks? 1

a) Mesh b) Bus c) Tree d) Star

3 Which of the following statements correctly creates a DataFrame? 1

a) pd.DataFrame([10,20,30])
b) pd.DataFrame({'Name':['A','B'],'Marks':[90,85]})
c) pd.DataFrame('A','B','C')
d) pd.DataFrame(Name,Marks)

4 A student copies an article from the Internet and submits it as her own work in a project report. This act is an example of: 1

a) Data Protection b) Cyber Hacking
c) Plagiarism d) Licensing Violation

5 1

```
import pandas as pd
s = pd.Series([10, 20, 30])
print(s + 5)
```

What is the output of the above code?

a) Error b) [15, 25, 35]
c) [10, 20, 30, 5] d) [5, 5, 5]

6 Consider the SQL query: 1
SELECT CONCAT(FNAME, ' ', LNAME) FROM STUDENT;
If FNAME = 'Riya' and LNAME = 'Sharma', the result will be:

a) RiyaSharma b) Riya-Sharma
c) Riya Sharma d) Riya_Sharma

7 Which of the following is **not a valid way** to select a column? 1

a) df['Age'] b) df.Age c) df(Age) d) Both b and c

8 The command 1
plt.bar(['X','Y','Z'], [10,20,15], width=0.3)
changes which aspect of the bar chart?

a) The spacing between bars b) The thickness of each bar
c) The color of bars d) The orientation of bars

9 If your home Wi-Fi connects laptops, phones, and smart TVs within the same building, what type of network does it form? 1

a) PAN b) LAN c) MAN d) WAN

10 import pandas as pd 1
df = pd.DataFrame({'A':[1,2,3], 'B':[4,5,6]})
What is the result of df.iloc[1,0]?

a) 2 b) 4 c) 1 d) 5

11 You have two lists: 1
subjects = ['Math', 'Science', 'English']
marks = [88, 92, 80]
Which command will correctly create a line chart?

a) plt.pie(subjects, marks)
b) plt.line(marks, labels=subjects)
c) plt.plot(marks, subjects)
d) plt.barh(marks, subjects)

12 Which of these clauses **must** appear before HAVING in an SQL SELECT statement? 1

a) WHERE b) GROUP BY
c) ORDER BY d) DISTINCT

13 Consider the following code segment: 1

```
import pandas as pd
df = pd.read_csv("student.csv")
print(df.head())
```

The file **student.csv** contains 100 records.
Which of the following statements is correct about the output?

a) It prints the first 10 rows of the DataFrame.
b) It prints the last 5 rows of the DataFrame.
c) It prints the first 5 rows of the DataFrame.
d) It prints the entire DataFrame.

14 Which of the following statements about **Free and Open Source Software (FOSS)** is correct? 1

a) FOSS allows use but not modification of code.
b) FOSS is free only for educational institutions.
c) FOSS allows users to use, modify, and distribute software freely.
d) FOSS cannot be used for commercial purposes.

15 Given: 1
```
import pandas as pd
s = pd.Series({'a':100, 'b':200, 'c':300})
print(s[1])
```
What will be the output?

a) 100 b) 200 c) 'b' d) Error

16 The school database needs to remove the record of a student who has left school. 1
Which SQL command should be used?

a) REMOVE FROM STUDENT WHERE RollNo=105;
b) DELETE FROM STUDENT WHERE RollNo=105;
c) DROP STUDENT WHERE RollNo=105;
d) ERASE FROM STUDENT WHERE RollNo=105;

17 A company uses a **fiber-optic network** between two buildings located far apart. The signal weakens midway, so they install a device to **boost the signal strength** without changing its content. Which device is it? 1

a) Router b) Gateway c) Repeater d) Modem

18 Which SQL command is used to add a new column in a table? 1

a) INSERT COLUMN b) UPDATE TABLE
c) ALTER TABLE d) MODIFY TABLE

19 Which of the following best describes **responsible e-waste management**?

a) Using non-rechargeable batteries
b) Disposing e-waste with regular garbage
c) Donating or recycling electronic items safely
d) Dumping old devices in landfills

Q-20 and Q-21 are Assertion (A) and Reason (R) Type questions.
Choose the correct option as:
(A) Both A and R are True, and R correctly explains A.
(B) Both A and R are True, but R does not correctly explain A.
(C) A is True, but R is False.
(D) A is False, but R is True.

20 **Assertion (A):** The read_csv() function of pandas can be used to import data from a CSV file into a DataFrame.
Reason (R): The read_csv() function automatically treats the first row of a CSV file as column headers unless specified otherwise.

21 **Assertion (A):** The DISTINCT keyword is used to eliminate duplicate rows from query results.
Reason (R): DISTINCT affects only numeric columns, not text columns.

SECTION - B

22 Explain the terms Static and dynamic Web pages. 2

OR

What are cookies?

23 What will be the output of the following SQL queries? 2

(i) SELECT RIGHT ("CHANDRAYAN3", 4);
(ii) SELECT ROUND (76345.456,2);

24 What is E -Waste? List any two E-Waste management techniques? 2

OR

List any one Positive impact and negative impact of usage of technology

25 What will be the output of the following code? 2

```
import pandas as pd 2
M=[15,-10,56,39,-90,15]
p=pd.Series(M)
print(p[0])
print(p[[0,3,4]])
```

26 Consider the given Series object Subject: 2

Index	Marks
English	75
Hindi	78
Math	82
Science	88

Write a program in python pandas to create this series using a dictionary.

OR

Write a program to create a series object using a dictionary that stores the number of Kendriya Vidyalayas in each city of cities of your state.
Note: Assume some cities like AGRA, JHANSI, MATHURA, NOIDA having 4, 3, 5, 4 KVs respectively and pandas library has been imported as mypandas.

27 List any two health hazards related to excessive use of Technology 2

28 Write SQL queries to perform the following: 2

Extract the **first 5 characters** from the string 'ArtificialIntelligence'.
Find the **position of the substring** "Science" in the string "DataScienceRocks".

SECTION - C

29 Aman, a librarian, wants to maintain a record of books in a library database. 2+1
He decides to create a table named **BOOKS** with the following structure:

Column Name	Data Type	Constraint / Description
BookID	INT	Primary Key
Title	VARCHAR(50)	—
Author	VARCHAR(30)	—
Publisher	VARCHAR(30)	—
Price	DECIMAL(7,2)	—

(i) Write an SQL statement to create the above table named BOOKS.
(ii) Write an SQL statement to insert the following record into the BOOKS table: BookID: 201, Title: "The Alchemist", Author: "Paulo Coelho", Publisher: "HarperCollins", Price: 499.50

30 A school maintains two tables in its database: 3

Table: STUDENTS

StudentID	StudentName	Class	Marks
1	Aryan	10	85
2	Neha	10	92

3	Rohit	11	78
4	Simran	11	88
5	Priya	10	95

Table: CLASSES

ClassID	Class	ClassTeacher
101	10	Mr. Sharma
102	11	Ms. Verma

a) Write an SQL query to find the **total marks** and **average marks** of all students.
b) Write an SQL query to display **StudentName**, **Class**, and **ClassTeacher** for each student.
c) Write an SQL query to display **Class** and **total marks** obtained by students in each class.

31 Sohil works in a multinational IT firm. One day, he came to know that some mails were sent from his official mail account but he had not actually sent them. 3
Based on the given information, answer the following questions:
(i) Sohil is a victim of which type of cybercrime?
(ii) Write any two precautions that one should take to protect oneself from being the victim of cybercrime.
(iii) Should Sohil immediately change the password of his email account?

32 (A) Consider the given DataFrame 'health'. 3

	Diseasename	Agent
0	Common cold	Virus
1	Chickenpox	Virus
2	Cholera	Bacteria
3	Tuberculosis	Bacteria

Write suitable Python statements for the following:
(i) Remove the row containing details of disease named Tuberculosis.
(ii) Add a new disease named 'Malaria' caused by 'Protozoa'.
(iii) Display the last 2 rows.

OR

(B) Consider the given DataFrame 'result':

	Name	Percentile
0	Rohit	95
1	Mohit	76
2	Raman	98

3	Aditya	47

Write the suitable Python statements for the following:
(i)Add a new column 'Grade' to the dataframe having values A, B, A, C.
(ii) Add a new row where Name is 'Arti' with Percentile as 92 and Grade A.
(iii) Display the top 3 rows.

SECTION – D

33 Consider the following table: 1*4 =4

Table : SALESMAN

Scode	Sname	Area	Qtysold	Dateofjoin
S001	Ravi	North	120	2015-10-01
S002	Sandeep	South	105	2012-08-01
S003	Sunil	NULL	68	2018-02-01
S004	Subh	West	280	2010-04-01
S005	Ankit	East	90	2018-10-01
S006	Raman	North	NULL	2019-12-01

Predict the output for the following SQL queries:
(i) SELECT MAX(Qtysold), MIN(Qtysold) FROM SALESMAN;
(ii) SELECT COUNT (Area) FROM SALESMAN;
(iii) SELECT LENGTH (Sname) FROM SALESMAN WHERE MONTH(Dateofjoin)=10;
(iv) SELECT Sname FROM SALESMAN WHERE RIGHT(Scode,1)=5;

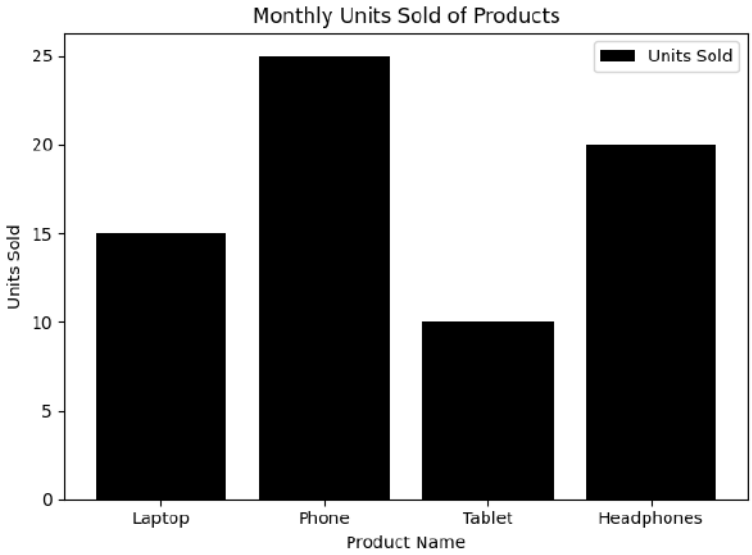
OR

Based on the given table SALESMAN write SQL queries to perform the following operations:
(i) Count the total number of salesman.
(ii) Display the maximum qtysold from each area.
(iii) Display the average qtysold from each area where number of salesman is more than 1.
(iv) Display all the records in ascending order of area.

34 A manager wants to visualize the monthly sales of four products in his store using a bar chart. 4

Data Table:

Product Name	Units Sold
Laptop	15
Phone	25
Tablet	10
Headphones	20

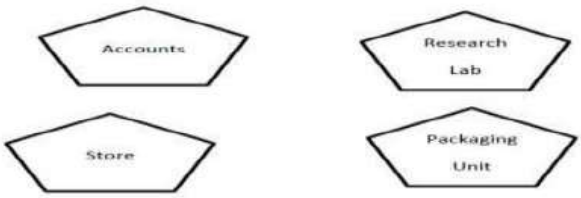



```
import matplotlib.pyplot as _____  # Statement-1
products = ['Laptop', 'Phone', 'Tablet', 'Headphones']
units_sold = [15, 25, 10, 20]
plt.____(products, units_sold, color='green')  # Statement-2
plt.____('Product Name')  # Statement-3
plt.ylabel('Units Sold')
plt.title('_____')  # Statement-4
plt.legend(['Units Sold'])
plt.show()
```

I. Statement-1: Fill in the alias used for matplotlib.pyplot.
II. Statement-2: Fill in the function used to create the bar chart.
III. Statement-3: Fill in the function used to label the x-axis.
IV. Statement-4: Fill in a suitable title for the chart.

SECTION - E

35 SHARMA Medicos Center has set up its new center in Delhi. It has four buildings as shown in the diagram 5 given below 5



Distance between various building are as follows:

Accounts to research Lab	55m
Accounts to store	150m
Store to packaging unit	160m
Packaging unit to research lab	60m
Accounts to packaging unit	125m
Store to research lab	180m

Number of Computers

Accounts	25
Research Lab	100
Store	15
Packaging Unit	60

As a network expert, provide the best possible answer for the following queries

a) Suggest a cable layout of connections between the buildings

b) Suggest the most suitable place (i.e. buildings) to house the server of this organization.

c) Suggest the placement of the following device with justification
   i) Repeater ii) Hub/Switch

d) Suggest a device to prevent unauthorized access to or from the network.

e) The company is planning to link its head office situated in Delhi with the offices in hilly areas. Suggest a way to connect it economically.

36 A school maintains a record of students including their grade, marks, and extracurricular activities. The principal wants to analyze this data to identify high achievers and update student information. 5

Here's the current DataFrame:

Student_Name	Grade	Marks	Activity
Ankit Sharma	10	88	Football
Priya Jain	10	92	Music
Rohan Verma	9	85	Debate
Simran Kaur	10	78	Basketball
Aarav Singh	9	90	Science Club

Write python statement of following tasks:

a) Print the details of students who scored more than **85 marks**.
b) Add a new column "Attendance" with values [95, 98, 92, 88, 96].
c) Delete the "Activity" column from the DataFrame.
d) Rename the column "Marks" to "Score".
e)Display only the "Student_Name" and "Score" columns.

37 A university maintains tables Students, Courses, Enrollments, and Grades. **5**
You are required to write SQL queries for the following tasks.

I. Concatenate First_Name and Last_Name columns from the Students table into a single column called Full_Name.
II. Count the total number of courses offered in the Courses table.
III. Display only the month and year of the Enrollment_Date column from the Enrollments table.
IV. Convert all values in the Course_Name column to uppercase from the Courses table.
V. Display the current year.

OR

Write suitable SQL query for the following:

I.Find the position of the letter 'i' in the Course_Name column of the Courses table.
II.Round the Grade column in the Grades table to the nearest integer.
III.Display the maximum Grade from the Grades table.
IV.Display the minimum Grade from the Grades table.
V.Calculate the total sum of the Credits column from the Courses table.

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कक्षा बारहवीं प्रीबोर्ड- II परीक्षा 2025-26

Pre Board II Examination 2025-26 for Class XII

Subject: Informatics Practices (065) (SET A)

TIME: 03 HOURS **M.M.: 70**

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- All programming questions are to be answered using Python Language only.
- In case of MCQ, text of the correct answer should also be written.

SECTION - A

1 Given: 1

```
import pandas as pd
s = pd.Series({'a':100, 'b':200, 'c':300})
print(s[1])
```

What will be the output?

a) 100 b) 200 c) 'b' d) Error

2 The school database needs to remove the record of a student who has left school. Which SQL command should be used? 1

a) REMOVE FROM STUDENT WHERE RollNo=105;
b) DELETE FROM STUDENT WHERE RollNo=105;
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b) Disposing e-waste with regular garbage
c) Donating or recycling electronic items safely
d) Dumping old devices in landfills

6 import pandas as pd 1
df = pd.DataFrame({'A':[1,2,3], 'B':[4,5,6]})
What is the result of df.iloc[1,0]?
a) 2 b) 4 c) 1 d) 5

7 You have two lists: 1
subjects = ['Math', 'Science', 'English']
marks = [88, 92, 80]
Which command will correctly create a line chart?
a) plt.pie(subjects, marks)
b) plt.line(marks, labels=subjects)
c) plt.plot(marks, subjects)
d) plt.barh(marks, subjects)

8 Which of these clauses **must** appear before HAVING in an SQL SELECT statement? 1
a) WHERE b) GROUP BY
c) ORDER BY d) DISTINCT

9 Consider the following code segment: 1
import pandas as pd
df = pd.read_csv("student.csv")
print(df.head())

The file **student.csv** contains 100 records.
Which of the following statements is correct about the output?
a) It prints the first 10 rows of the DataFrame.
b) It prints the last 5 rows of the DataFrame.
c) It prints the first 5 rows of the DataFrame.
d) It prints the entire DataFrame.

10 Which of the following statements about **Free and Open Source Software (FOSS)** is correct? 1
a) FOSS allows use but not modification of code.
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b) SELECT AVG(SALARY) GROUP BY DEPT;
c) SELECT DEPT, AVG(SALARY) FROM EMPLOYEE GROUP BY DEPT;
d) SELECT AVG(SALARY) FROM EMPLOYEE ORDER BY DEPT;

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a) Data Protection b) Cyber Hacking
c) Plagiarism d) Licensing Violation

15 1
```
import pandas as pd
s = pd.Series([10, 20, 30])
print(s + 5)
```
What is the output of the above code?
a) Error b) [15, 25, 35]
c) [10, 20, 30, 5] d) [5, 5, 5]

16 Consider the SQL query: 1
SELECT CONCAT(FNAME, ' ', LNAME) FROM STUDENT;
If FNAME = 'Riya' and LNAME = 'Sharma', the result will be:
a) RiyaSharma b) Riya-Sharma
c) Riya Sharma d) Riya_Sharma

17 Which of the following is **not a valid way** to select a column? 1
a) df['Age'] b) df.Age c) df(Age) d) Both b and c

18 The command 1
plt.bar(['X','Y','Z'], [10,20,15], width=0.3)
changes which aspect of the bar chart?
a) The spacing between bars b) The thickness of each bar
c) The color of bars d) The orientation of bars

19 If your home Wi-Fi connects laptops, phones, and smart TVs within the same building, what type of network does it form?
a) PAN b) LAN c) MAN d) WAN

Q-20 and Q-21 are Assertion (A) and Reason (R) Type questions. Choose the correct option as:
(A) Both A and R are True, and R correctly explains A.
(B) Both A and R are True, but R does not correctly explain A.
(C) A is True, but R is False.
(D) A is False, but R is True.

20 **Assertion (A):** The read_csv() function of pandas can be used to import data from a CSV file into a DataFrame.
Reason (R): The read_csv() function automatically treats the first row of a CSV file as column headers unless specified otherwise.

21 **Assertion (A):** The DISTINCT keyword is used to eliminate duplicate rows from query results.
Reason (R): DISTINCT affects only numeric columns, not text columns.

SECTION - B

22 Consider the given Series object Subject: 2

Index	Marks
English	75
Hindi	78
Math	82
Science	88

Write a program in python pandas to create this series using a dictionary.

OR

Write a program to create a series object using a dictionary that stores the number of Kendriya Vidyalayas in each city of cities of your state.
Note: Assume some cities like AGRA, JHANSI, MATHURA, NOIDA having 4, 3, 5, 4 KVs respectively and pandas library has been imported as mypandas.

23 List any two health hazards related to excessive use of Technology 2

24 Write SQL queries to perform the following: 2
Extract the **first 5 characters** from the string 'ArtificialIntelligence'.
Find the **position of the substring** "Science" in the string "DataScienceRocks".

25 Explain the terms Static and dynamic Web pages. 2

OR

What are cookies?

26 What will be the output of the following SQL queries? 2

(i) SELECT RIGHT ("CHANDRAYAN3", 4);
(ii) SELECT ROUND (76345.456,2);

27 What is E -Waste? List any two E-Waste management techniques? 2

OR

List any one Positive impact and negative impact of usage of technology

28 What will be the output of the following code? 2

```
import pandas as pd 2
M=[15,-10,56,39,-90,15]
p=pd.Series(M)
print(p[0])
print(p[[0,3,4]])
```

SECTION - C

29 Sohil works in a multinational IT firm. One day, he came to know that some mails were sent from his official mail account but he had not actually sent them. 3
Based on the given information, answer the following questions:
(i) Sohil is a victim of which type of cybercrime?
(ii) Write any two precautions that one should take to protect oneself from being the victim of cybercrime.
(iii) Should Sohil immediately change the password of his email account?

30 (A) Consider the given DataFrame 'health'. 3

	Diseasename	**Agent**
0	Common cold	Virus
1	Chickenpox	Virus

2	Cholera	Bacteria
3	Tuberculosis	Bacteria

Write suitable Python statements for the following:
(i) Remove the row containing details of disease named Tuberculosis.
(ii) Add a new disease named 'Malaria' caused by 'Protozoa'.
(iii) Display the last 2 rows.

OR

(B) Consider the given DataFrame 'result':

	Name	Percentile
0	Rohit	95
1	Mohit	76
2	Raman	98
3	Aditya	47

Write the suitable Python statements for the following:
(i) Add a new column 'Grade' to the dataframe having values A, B, A, C.
(ii) Add a new row where Name is 'Arti' with Percentile as 92 and Grade A.
(iii) Display the top 3 rows.

31 Aman, a librarian, wants to maintain a record of books in a library database. 2+
He decides to create a table named **BOOKS** with the following structure: 1

Column Name	Data Type	Constraint / Description
BookID	INT	Primary Key
Title	VARCHAR(50)	—
Author	VARCHAR(30)	—
Publisher	VARCHAR(30)	—
Price	DECIMAL(7,2)	—

(i) Write an SQL statement to create the above table named BOOKS.
(ii) Write an SQL statement to insert the following record into the BOOKS table: BookID: 201, Title: "The Alchemist", Author: "Paulo Coelho", Publisher: "HarperCollins", Price: 499.50

32 A school maintains two tables in its database: 3
Table: STUDENTS

StudentID	StudentName	Class	Marks
1	Aryan	10	85
2	Neha	10	92

3	Rohit	11	78
4	Simran	11	88
5	Priya	10	95

Table: CLASSES

ClassID	Class	ClassTeacher
101	10	Mr. Sharma
102	11	Ms. Verma

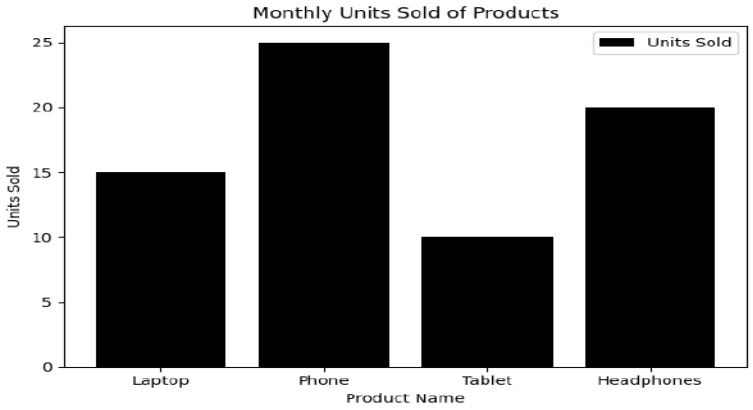
a) Write an SQL query to find the **total marks** and **average marks** of all students.
b) Write an SQL query to display **StudentName**, **Class**, and **ClassTeacher** for each student.
c) Write an SQL query to display **Class** and **total marks** obtained by students in each class.

SECTION – D

33 A manager wants to visualize the monthly sales of four products in his store using a bar chart. 1X4= 4

Data Table:

Product Name	Units Sold
Laptop	15
Phone	25
Tablet	10
Headphones	20




```
import matplotlib.pyplot as _____  # Statement-1
products = ['Laptop', 'Phone', 'Tablet', 'Headphones']
units_sold = [15, 25, 10, 20]
plt._____(products, units_sold, color='green')  # Statement-2
plt._____('Product Name')  # Statement-3
plt.ylabel('Units Sold')
plt.title('_____')  # Statement-4
plt.legend(['Units Sold'])
plt.show()
```

I. Statement-1: Fill in the alias used for matplotlib.pyplot.
II. Statement-2: Fill in the function used to create the bar chart.

III. Statement-3: Fill in the function used to label the x-axis.
IV. Statement-4: Fill in a suitable title for the chart.

34 Consider the following table: 4

Table : SALESMAN

Scode	Sname	Area	Qtysold	Dateofjoin
S001	Ravi	North	120	2015-10-01
S002	Sandeep	South	105	2012-08-01
S003	Sunil	NULL	68	2018-02-01
S004	Subh	West	280	2010-04-01
S005	Ankit	East	90	2018-10-01
S006	Raman	North	NULL	2019-12-01

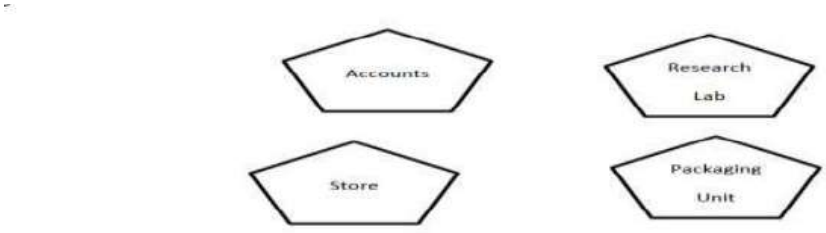
Predict the output for the following SQL queries:
(i) SELECT MAX(Qtysold), MIN(Qtysold) FROM SALESMAN;
(ii) SELECT COUNT (Area) FROM SALESMAN;
(iii) SELECT LENGTH (Sname) FROM SALESMAN WHERE MONTH(Dateofjoin)=10;
(iv) SELECT Sname FROM SALESMAN WHERE RIGHT(Scode,1)=5;

OR

Based on the given table SALESMAN write SQL queries to perform the following operations:
(i) Count the total number of salesman.
(ii) Display the maximum qtysold from each area.
(iii) Display the average qtysold from each area where number of salesman is more than 1.
(iv) Display all the records in ascending order of area.

SECTION - E

35 SHARMA Medicos Center has set up its new center in Delhi. It has four buildings as shown in the diagram 5 given below 5



Distance between various building are as follows:

Accounts to research Lab	55m
Accounts to store	150m
Store to packaging unit	160m
Packaging unit to research lab	60m
Accounts to packaging unit	125m
Store to research lab	180m

Number of Computers

Accounts	25
Research Lab	100
Store	15
Packaging Unit	60

As a network expert, provide the best possible answer for the following queries

a) Suggest a cable layout of connections between the buildings

b) Suggest the most suitable place (i.e. buildings) to house the server of this organization.

c) Suggest the placement of the following device with justification

i) Repeater ii) Hub/Switch

d) Suggest a device to prevent unauthorized access to or from the network.

e) The company is planning to link its head office situated in Delhi with the offices in hilly areas. Suggest a way to connect it economically.

36 A school maintains a record of students including their grade, marks, and extracurricular activities. The principal wants to analyze this data to identify high achievers and update student information. 5

Here's the current DataFrame:

Student_Name	Grade	Marks	Activity
Ankit Sharma	10	88	Football
Priya Jain	10	92	Music
Rohan Verma	9	85	Debate
Simran Kaur	10	78	Basketball
Aarav Singh	9	90	Science Club

Write python statement of following tasks:

a) Print the details of students who scored more than **85 marks**.
b) Add a new column "Attendance" with values [95, 98, 92, 88, 96].
c) Delete the "Activity" column from the DataFrame.
d) Rename the column "Marks" to "Score".
e) Display only the "Student_Name" and "Score" columns.

37 A university maintains tables Students, Courses, Enrollments, and Grades. 5

You are required to write SQL queries for the following tasks.

I. Concatenate First_Name and Last_Name columns from the Students table into a single column called Full_Name.
II. Count the total number of courses offered in the Courses table.
III. Display only the month and year of the Enrollment_Date column from the Enrollments table.
IV. Convert all values in the Course_Name column to uppercase from the Courses table.
V. Display the current year.

OR

Write suitable SQL query for the following:

I. Find the position of the letter 'i' in the Course_Name column of the Courses table.
II. Round the Grade column in the Grades table to the nearest integer.
III. Display the maximum Grade from the Grades table.
IV. Display the minimum Grade from the Grades table.
V. Calculate the total sum of the Credits column from the Courses table.

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग **SET B**

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

कक्षा बारहवीं प्री बोर्ड II परीक्षा 2025

PRE BOARD II EXAMINATION for Class XII 2025

SUBJECT : COMPUTER SCIENCE (083)

TIME: 3 HOURS **MAX. MARKS: 70**

सामान्य निर्देश/GENERAL INSTRUCTIONS:

This question paper contains 37 questions.

- All questions are compulsory. However, internal choices have been provided in some questions. Attempt only one of the choices in such questions
- The paper is divided into 5 Sections- A, B, C, D and E.
- Section A consists of 21 questions (1 to 21). Each question carries 1 Mark.
- Section B consists of 7 questions (22 to 28). Each question carries 2 Marks.
- Section C consists of 3 questions (29 to 31). Each question carries 3 Marks.
- Section D consists of 4 questions (32 to 35). Each question carries 4 Marks.
- Section E consists of 2 questions (36 to 37). Each question carries 5 Marks.
- All programming questions are to be answered using Python Language only.
- In case of MCQ, text of the correct answer should also be written.

SECTION A

1 State True or False 1
In Python, a dictionary is an ordered collection of items(key:value pairs).

2 In SQL, what is the difference between equi join and natural join ? 1

3 What will be the output of following expression? 1
(5<10) and (10< 5) or (3<18) and not 8<18
a) True b) False c) Error d) No output

4 What will be the output of the following code? 1
```
L = ["My", "Computer", "Lab"]
print(L[0][0] + L[1][-1])
```
a) Cr b) cb c) Mr d) Mb

5 What will be output of the following code snippet? 1
```
Msg='Wings of Fire!'
print (Msg[-12: -14:2])
```

6 What will be the output of the following Python code? 1
```
student = {"name": "Rohan", "grade": "A", "subject": "Maths"}
print(student.get("age", "Data Not Available"))
```
a) Rohan b) Data Not Available c) None d) A

7 The following expression will evaluate to 1
```
print(2+(5%5)**2**1/5+2)
```
a) 4.6 b) 4.0 c) 5.4 d) 5.0

8 Consider the given SQL Query: 1
SELECT job_title, AVG(salary) FROM employees HAVING AVG(salary) > 50000 GROUP BY job_title;
Aarav executes the above query but does not get the correct output.
Write the correction.

9 What will be the output of the following Python code? 1

```
try:
    x = int("abc")
except ValueError:
    print("Value Error occurred!")
except Exception:
    print("Some other error!")
```

a) Value Error occurred! b) Some other error!
c) abc d) Nothing is printed

10 Which of the following options will not result in an error when performed on types in python where tp = (5,2,7,0,3) ? 1
a) Tp[1] = 2 b) tp.append(2)
c) tp1 = tp+tp d) tp.sum( )

11 What possible output is expected to be displayed on the screen at the time of execution of the following Python program? 1

```
import random
nums = [5, 15, 25, 35, 45]
start = random.randint(1, 2)
end = random.randint(2, 3)
for i in range(start, end + 1):
    print(nums[i], end="#")
```

a) 5#15#25#
b) 15#35#
c) 15#25#35#45#
d) 25#

12 Which of the following is used to create the structure of a web page? 1
a) HTML b) CSS c) JavaScript d) FTP

13 Which SQL command can change the cardinality of an existing relation? 1
a) Insert b) Delete c) Both a) & b) d) Drop

14 What is the output of the expression? 1

```
St1="wonder@land@city"
print(St1.partition("@"))
```

a) (“wonder”, “@”, “land”, “@”, “city”)
b) [“wonder”, “@”, “land@city”]
c) [“wonder”, “land”, “city”]
d) Error

15 In SQL, a table initially contains 4 columns and 8 rows. If 3 more columns and 2 more rows are added to the existing table, what will be the updated cardinality of the table? 1

a) 6 b) 7 c) 10 d) 11

16 Which statement is used to modify column name in a table? 1

(a) CHANGE (b) MODIFY (c) UPDATE (d) ALTER

17 The protocol used identify the corresponding url from ip address is _____ 1

a)IP b)HTTP c)TCP d)FTP

18 The device used to convert analog signal to digital signal and vice versa is .. 1

a)Amplifier b)Router c)Modem d)Switch

19 What will be the output of the following code: 1

```
sal = 5000
def inc_sal(per):
    global sal
    inc = sal * (per / 100)
    sal += inc
inc_sal(10)
print(sal,end='%')
sal=6000
print(sal,end='$')
```

a) 5000%6000$ b) 5500.0%6000$

c) 5000.0$6000% d) 5500%5500$

Q20 and Q21 are Assertion(A) and Reason(R) based questions. Mark the correct choice as:

a) Both A and R are True and R is the correct explanation for A.

b) Both A and R are True and R is not the correct explanation for A.

c) A is True but R is False.

d) A is False but R is True.

20 Assertion (A): The expression "hello".upper() in Python will modify the original string. 1

Reason (R) : The upper() method converts all characters of a string to uppercase and updates the same string object.

21 Assertion (A) : Both WHERE and HAVING clauses are used to specify conditions. 1

Reason(R) : The WHERE and HAVING clauses are interchangeable.

SECTION B

22 A. Differentiate list and tuple with respect to mutability. Give suitable example to illustrate the same . 2

OR

B. Explain the difference between break and continue statements in Python with a suitable example.

23 Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code. 2

```
p=30
for c in range(0,p)
    if c%4==0:
        print (c*4)
    elseif c%5==0:
        print (c+3)
    else
        Print(c+10)
```

24 A. (Answer using Python built-in methods/functions only): 2

I. Write a statement to count the occurrences of 4 in L1.

II. Write a statement to sort the elements of list L1 in ascending order.

OR

B. Predict the output of the following Python code:

```
Str="Computer Science with Python"
print(Str.partition("with"))
print(Str.find("e",10,20))
```

25 A. Write a function update_price () in Python that accepts a dictionary items and two parameters — item_name and new_price. 2

If the item_name exists in the dictionary, update its price with new_price.
If it does not exist, print "Item not found".

OR

B. Write a Python function add_item() that accepts a list items and an element new_item. The function should add the element to the list only if it does not already exist. If the element already exists in the list, print "Item already exists" instead of adding it.

26 Predict the output of the Python code given below : 2

```
emp = {"East": [500,900],"West": [700,800],"North":
[700,800],"South":[800,700]}
value = [ ]
for n in emp:
   r1 = emp[n]
   x = (r1[0] + r1[1]) / 2
   if x > 700:
      value.append(n)
print(value)
```

27 A. Write suitable commands to do the following in MySQL. 2

I. Delete the values from table DATA.

II. Open a database named SQP

OR

B. Differentiate between alter and update query in SQL with a suitable example.

28 A. Define the following terms: 2

I. Repeater

II. Modem

OR

B.

I. How is it easier to diagnose fault in Star topology than in Bus topology ?

II.Mala is a bit confused between the terms Web server and Web browsers. Help her in understanding both the terms with the help of suitable example.

SECTION C

29 A. Write a Python function that count the lines start with the word "the" in a file "xyz.txt" and display it at the end. 3

OR

B. Write a Python function that count total number of vowels in a file "abc.txt"

30 There is a stack named Uniform that contains records of uniforms Each record is represented as a list containing uid, uame, ucolour, usize, uprice. 3

Write the following user-defined functions in python to perform the specified operations on the stack Uniform :

I Push_Uniform(new_uniform):adds the new uniform record onto the stack

II Pop_Uniform(): pops the topmost record from the stack and returns it. If the stack is already empty, the function should display "underflow".

III Peep(): This function diplay the topmost element of the stack without deleting it.if the stack is empty,the function should display 'None'.

31 A. Predict the output of the following Python code: 3

```
s1="LTC-26"
s2=""
i=0
while i<len(s1):
    if s1[i]>='0' and s1[i]<='9':
        Num=int(s1[i])
        Num-=1
        s2=s2+str(Num)
    elif s1[i]>='A' and s1[i]<='Z':
        s2=s2+s1[i+1]
    else:
        s2=s2+'^'
    i+=1
print(s2)
```

OR

B. Predict the output of the Python code given below:

```
T= ["20", "50", "30", "40"]
Counter=3
Total= 0
for I in [1,2,3,4]:
      newT=T[Counter]
      Total= float (newT) + I
      print(Total)
      Counter=Counter-1
```

SECTION D

32 Consider the following table named Vehicle and state the query or state the output 4

Table:- Vehicle

VID	LicensePlate	VType	Owner	Cost	Contact	State
1	MH12AB1234	Car	Raj Kumar	65	9876543210	Maharastra
2	DL3CDE5678	Truck	Arjith Singh	125	8765432109	New Delhi
3	KA04FG9012	Motor cycle	Prem Sharma		9123456789	Karnataka
4	TN07GH3456	SUV	Shyad Usman	65	9987654321	Tamil Nadu
5	KA01AB1234	Car	Devid jhon	65	9876543210	Karnataka
6	TN02CD5678	Truck	Anjali Iyer	125	8765432109	Tamil Nadu
7	AP03EF9012	Motor cycle	Priya Reddy		9123456789	Andhra Pradesh

A. Write the following queries:
I. To display number of different vehicle type from the table vehicle
II. To display number of records entered vehicle type wise whose minimum cost is above 80
III. To set the cost as 45 for those vehicles whose cost is not mentioned
IV. To remove all motor cycle from vehicle

OR

B. Predict the output of the following:
(i) SELECT VTYPE,AVG(COST) FROM VEHICLE GROUP BY VTYPE;
(ii) SELECT OWNER ,VTYPE,CONTACT FROM VEHICLE WHERE OWNER LIKE "P%";
(iii)SELECT COUNT(*) FROM VEHICLE WHERE COST IS NULL;
(iv) SELECT MAX(COST) FROM VEHICLE;

33 Abhishek is making a software on "Countries & their Capitals" in which various records are to be stored/retrieved in CAPITAL.CSV data file. It consists of some records. As a programmer, you have to help him to successfully execute the program. 4

A. Write a function in Python named AddNewRec(Country,Capital) to append following records in the file "CAPITAL.CSV".

["FRANCE","PARIS"]
["SRILANKA","COLOMBO"]

B. Write a function in Python named ShowRec( ) that will show all the contents of CAPITAL.CSV

34 Pranav is managing a Travel Database and needs to access certain information from the Hotels and Bookings tables for an upcoming tourism survey. Help him extract the required information by writing the appropriate SQL queries as per the tasks mentioned below: 4

Table: Hotels

H_ID	Hotel_Name	City	Star_Rating
1	Hotel1	Delhi	5
2	Hotel2	Mumbai	5
3	Hotel3	Hyderaba	4
4	Hotel4	Bengaluru	4
5	Hotel5	Chennai	5
6	Hotel6	Kolkata	4

Table: Bookings

B_ID	H_ID	Customer_Name	Check_In	Check_Out
1	1	Jiya	2024-12-03	2024-12-05
2	2	Priya	2024-12-01	2024-12-07
3	3	Alicia	2024-12-02	2024-12-06
4	4	Bhavik	2024-12-03	2024-12-08
5	5	Charu	2024-12-03	2024-12-09
6	6	Esha	2024-12-04	2024-12-06
7	4	Dia	2024-12-04	2024-12-08
8	1	Sonia	2024-12-02	2024-12-08

I. To display a list of customer names who have Star_Rating equals to 5.
II. To display the booking details for customers who have booked hotels in 'Mumbai', 'Chennai', or 'Kolkata'.
III. To delete all bookings where the check-in date is after 2024-12-03.
IV. A. To display the Cartesian Product of the two tables.

OR

B. To display the customer's name along with their booked hotel's name.

35 MySQL database named MyDB has a product_inventory table in MySQL which contains the following attributes: 4

- Item_code: Item code (Integer)
- Product_name: Name of product (String)
- Quantity: Quantity of product (Integer)
- Cost: Cost of product (Integer)

Consider the following details to establish Python-MySQL connectivity:

- Username: admin
- Password: computer24
- Host: localhost

Write a Python program to change the Quantity of the product to 91 whose Item_code is
208 in the product_inventory table.

SECTION E

36 Ms. Neha, a librarian at a public library, needs to maintain records of books. Each record should include: Book_ID, Title, Author, and Price. 2+3

Write the Python functions to:
I. Input book data and append it to a binary file named Books.dat.
II. Update the price of all books written by "Ruskin Bond" to ₹500.

37 ABC Inc. is planning a new campus in Kolkatta while maintaining its headquarters in Bengaluru. The campus will have four buildings: HR, Finance, IT, and Logistics. As a network expert, you are tasked with proposing the best network solutions for their needs based on the following: 5

Distance between the buildings

From	To	Distance (in meters)
HR	Finance	50
HR	IT	175
HR	Logistics	90
Finance	IT	60
Finance	Logistics	70
IT	Logistics	60

Number of Computers in Each Block:

Block	Number of Computers
HR	60
Finance	40
IT	90
Logistics	35

I. Suggest the best location for the server in the Kolkatta campus and explain your reasoning.

II. Suggest the placement of the following devices:

a) Repeater b) Switch

III. Suggest and draw a cable layout of connections between the buildings inside the campus.

IV. The organisation plans to provide a high-speed link with its head office using a wired connection. Which of the cables will be most suitable for this job?

V. A. What is the use of VoIP?

OR

B. Which type of network (PAN, LAN, MAN, or WAN) will be formed while connecting the Kolkatta campus to Bengaluru Headquarters?

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग **SET A**

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

कक्षा बारहवीं प्री बोर्ड II परीक्षा 2025

PRE BOARD II EXAMINATION for Class XII 2025

SUBJECT : COMPUTER SCIENCE (083)

TIME: 3 HOURS **MAX. MARKS: 70**

सामान्य निर्देश/GENERAL INSTRUCTIONS:

This question paper contains 37 questions.

- All questions are compulsory. However, internal choices have been provided in some questions. Attempt only one of the choices in such questions
- The paper is divided into 5 Sections- A, B, C, D and E.
- Section A consists of 21 questions (1 to 21). Each question carries 1 Mark.
- Section B consists of 7 questions (22 to 28). Each question carries 2 Marks.
- Section C consists of 3 questions (29 to 31). Each question carries 3 Marks.
- Section D consists of 4 questions (32 to 35). Each question carries 4 Marks.
- Section E consists of 2 questions (36 to 37). Each question carries 5 Marks.
- All programming questions are to be answered using Python Language only.
- In case of MCQ, text of the correct answer should also be written.

SECTION A

1 State True or False 1
In Python, a dictionary is an ordered collection of items(key:value pairs).

2 What will be the output of the following code? 1
```
L = ["My", "Computer", "Lab"]
print(L[1][0] + L[2][-1])
```
a) Cb b) cb c) cB d) ab

3 What will be the output of following expression? 1
(5<10) and (10< 5) or (3<18) and not 8<18
a) True b) False c) Error d) No output

4 In SQL, which type of Join(s) may contain duplicate column(s)? 1

5 What will be output of the following code snippet? 1
```
Msg='Wings of Fire!'
print (Msg[-9: :2])
```

6 Which of the following options will not result in an error when performed on types in python where tp = (5,2,7,0,3) ? 1
a) Tp[1] = 2 b) tp.append(2)
c) tp1 = tp+tp d) tp.sum( )

7 The following expression will evaluate to 1
```
print(2+(5%5)**2**1/5+2)
```
a) 4.0 b) 4.6 c) 5.4 d) 5.0

8 Consider the given SQL Query: 1

```
SELECT job_title, AVG(salary) FROM employees HAVING AVG(salary) > 50000
GROUP BY job_title;
```

Aarav executes the above query but does not get the correct output. Write the correction.

9 What will be the output of the following Python code? 1

```
try:
    x = int("abc")
except ValueError:
    print("Value Error occurred!")
except Exception:
    print("Some other error!")
```

a) Value Error occurred! b) Some other error!
c) abc d) Nothing is printed

10 What will be the output of the following Python code? 1

```
student = {"name": "Rohan", "grade": "A", "subject": "Maths"}
print(student.get("age", "Data Not Available"))
```

a) Rohan b) A c) None d) Data Not Available

11 What possible output is expected to be displayed on the screen at the time of execution of the following Python program? 1

```
import random
nums = [5, 15, 25, 35, 45]
start = random.randint(1, 2)
end = random.randint(2, 3)
for i in range(start, end + 1):
    print(nums[i], end="#")
```

a) 5#15#25# b) 15#35# c) 15#25#35#45# d) 25#

12 What will be the output of the following code: 1

```
sal = 5000
def inc_sal(per):
    global sal
    inc = sal * (per / 100)
    sal += inc
inc_sal(10)
print(sal,end='%')
sal=6000
print(sal,end='$')
```

a) 5000%6000$ b) 5500.0%6000$
c) 5000.0$6000% d) 5500%5500$

13 Which SQL command can change the degree of an existing relation? 1

a) Insert b) Delete c) Both a) & b) d) Drop

14 What is the output of the expression? 1

```
St1="wonder@land@city"
print(St1.split("@"))
```

a) (“wonder”, “@”, “land”, “@”, “city”)
b) [“wonder”, “@”, “land”,”@’,”city”]
c) [“wonder”, “land”, “city”]
d) Error

15 In SQL, a table initially contains 4 columns and 8 rows. If 3 more columns and 2 more rows are added to the existing table, what will be the updated cardinality of the table? 1

a) 6 b) 7 c) 10 d) 11

16 Which statement is used to modify data in a table? 1

a) CHANGE b) MODIFY c) UPDATE d) ALTER

17 The protocol used identify the corresponding url from ip address is _____ 1

a)IP b)HTTP c)TCP d)FTP

18 The device used to connect different networks is .. 1

a)Bridge b)Router c)Modem d)Switch

19 Which of the following is used to create the structure of a web page? 1

a) HTML b) CSS c) JavaScript d) FTP

Q20 and Q21 are Assertion(A) and Reason(R) based questions. Mark the correct choice as:

a) Both A and R are True and R is the correct explanation for A.
b) Both A and R are True and R is not the correct explanation for A.
c) A is True but R is False.
d) A is False but R is True.

20 Assertion (A): The expression "hello".upper() in Python will modify the original string. 1

Reason (R): The upper() method converts all characters of a string to uppercase and updates the same string object.

21 Assertion (A) : Both WHERE and HAVING clauses are used to specify conditions. 1

Reason(R) : The WHERE and HAVING clauses are interchangeable.

SECTION B

22 A. Differentiate list and tuple with respect to mutability. Give suitable example to illustrate the same. 2

OR

B. Explain the difference between break and continue statements in Python with a suitable example.

23 Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code. 2

```
p=30
for c in range(0,p)
    if c%4==0:
        print (c*4)
    elseif c%5==0:
        print (c+3)
    else
        Print(c+10)
```

24 A. (Answer using Python built-in methods/functions only): 2

I. Write a statement to count the occurrences of 4 in L1.

II. Write a statement to sort the elements of list L1 in ascending order.

OR

B. Predict the output of the following Python code:

```
Str="Computer Science with Python"
print(Str.partition("with"))
print(Str.find("e",10,20))
```

25 A. Write a function update_price () in Python that accepts a dictionary items and two parameters — item_name and new_price. 2
If the item_name exists in the dictionary, update its price with new_price.
If it does not exist, print "Item not found".

OR

B. Write a Python function add_item() that accepts a list items and an element new_item. The function should add the element to the list only if it does not already exist. If the element already exists in the list, print "Item already exists" instead of adding it.

26 Predict the output of the Python code given below : 2

```
emp = {"East": [500,900],"West": [700,800],"North":
[700,800],"South":[800,700]}
value = [ ]
for n in emp:
    r1 = emp[n]
    x = (r1[0] + r1[1]) / 2
    if x > 700:
        value.append(n)
print(value)
```

27 A. Write suitable commands to do the following in MySQL. 2
I. Delete the values from table DATA.
II. Open a database named SQP

OR

B. Differentiate between alter and update query in SQL with a suitable example.

28 A. Define the following terms: 2

I. Repeater

II. Modem

OR

B.

I. How is it easier to diagnose fault in Star topology than in Bus topology ?

II.Mala is a bit confused between the terms Web server and Web browsers. Help her in understanding both the terms with the help of suitable example.

SECTION-C

29 A. Write a Python function that count the lines start with the word "the" in a file "xyz.txt" and display it at the end. 3

OR

B. Write a Python function that count total number of vowels in a file "abc.txt"

30 There is a stack named Uniform that contains records of uniforms Each record is represented as a list containing uid, uame, ucolour, usize, uprice. Write the following user-defined functions in python to perform the specified operations on the stack Uniform : 3

I Push_Uniform(new_uniform):adds the new uniform record onto the stack

II Pop_Uniform(): pops the topmost record from the stack and returns it. If the stack is already empty, the function should display "underflow".

III Peep(): This function diplay the topmost element of the stack without deleting it.if the stack is empty,the function should display 'None'.

31 A. Predict the output of the following Python code: 3

```
s1="LTC-26"
s2=""
i=0
while i<len(s1):
    if s1[i]>='0' and s1[i]<='9':
        Num=int(s1[i])
        Num-=1
        s2=s2+str(Num)
    elif s1[i]>='A' and s1[i]<='Z':
        s2=s2+s1[i+1]
    else:
        s2=s2+'^'
    i+=1
print(s2)
```

OR

B. Predict the output of the Python code given below:

```
T= ["20", "50", "30", "40"]
Total= 0
for I in [1,2,3,4]:
    newT=T[Counter]
    Total= float (newT) + I
    print(Total)
    Counter=Counter-1
```

SECTION-D

32 Consider the following table named Vehicle and state the query or state the output 4

Table:- Vehicle

VID	LicensePlate	VType	Owner	Cost	Contact	State
1	MH12AB1234	Car	Raj Kumar	65	9876543210	Maharastra
2	DL3CDE5678	Truck	Arjith Singh	125	8765432109	New Delhi
3	KA04FG9012	Motor cycle	Prem Sharma		9123456789	Karnataka
4	TN07GH3456	SUV	Shyad Usman	65	9987654321	Tamil Nadu
5	KA01AB1234	Car	Devid jhon	65	9876543210	Karnataka
6	TN02CD5678	Truck	Anjali Iyer	125	8765432109	Tamil Nadu
7	AP03EF9012	Motor cycle	Priya Reddy		9123456789	Andhra Pradesh

A. Write the following queries:

I. To display number of different vehicle type from the table vehicle

II. To display number of records entered vehicle type wise whose minimum cost is above 80

III. To set the cost as 45 for those vehicles whose cost is not mentioned

IV. To remove all motor cycle from vehicle

OR

B. Predict the output of the following:

(i) SELECT VTYPE,AVG(COST) FROM VEHICLE GROUP BY VTYPE;

(ii) SELECT OWNER ,VTYPE,CONTACT FROM VEHICLE WHERE OWNER LIKE "P%";

(iii)SELECT COUNT(*) FROM VEHICLE WHERE COST IS NULL;

(iv) SELECT MAX(COST) FROM VEHICLE;

33 Abhishek is making a software on "Countries & their Capitals" in which various records are to be stored/retrieved in CAPITAL.CSV data file. It consists of some records. As a programmer, you have to help him to successfully execute the program. 4

A. Write a function in Python named AddNewRec(Country,Capital) to append following records in the file "CAPITAL.CSV".

["FRANCE","PARIS"]

["SRILANKA","COLOMBO"]

B. Write a function in Python named ShowRec( ) that will show all the contents of CAPITAL.CSV

34 Salman has been entrusted with the management of Airlines Database.He needs to access some information from Airports and Flights tables for a survey. Help him extract the following information by writing the desired SQL queries as mentioned below. 4

Table - Airports

A_ID	A_Name	City	IATACode
1	Indira Gandhi Intl	Delhi	DEL
2	Chhatrapati Shivaji Intl	Mumbai	BOM
3	Rajiv Gandhi Intl	Hyderabad	HYD
4	Kempegowda Intl	Bengaluru	BLR
5	Chennai Intl	Chennai	MAA
6	Netaji Subhas Chandra Bose Intl	Kolkata	CCU

Table - Flights

F_ID	A_ID	F_No	Departure	Arrival
1	1	6E 1234	DEL	BOM
2	2	AI 5678	BOM	DEL
3	3	SG 9101	BLR	MAA
4	4	UK 1122	DEL	CCU
5	1	AI 101	DEL	BOM
6	2	6E 204	BOM	HYD
7	1	AI 303	HYD	DEL
8	3	SG 404	BLR	MAA

I To display airport name, city, flight id, flight number corresponding flights whose departure is from delhi

II Display the flight details of those flights whose arrival is BOM, MAA or CCU

III To delete all flights whose flight number starts with 6E.

IV A) To display Cartesian Product of two tables

OR

B) To display airport name,city and corresponding flight number

35 MySQL database named MyDB has a product_inventory table in MySQL which contains the following attributes: 4

- Item_code: Item code (Integer)
- Product_name: Name of product (String)
- Quantity: Quantity of product (Integer)
- Cost: Cost of product (Integer)

Consider the following details to establish Python-MySQL connectivity:
- Username: admin
- Password: computer24
- Host: localhost

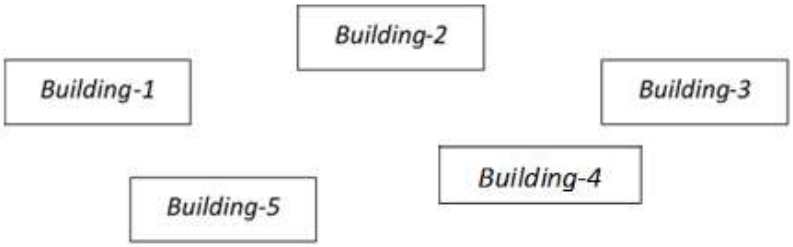
Write a Python program to change the Quantity of the product to 91 whose Item_code is 208 in the product_inventory table.

SECTION-E

36 Ms. Neha, a librarian at a public library, needs to maintain records of books. Each record should include: Book_ID, Title, Author, and Price. 2+3

Write the Python functions to:
I. Input book data and append it to a binary file named Books.dat.
II. Update the price of all books written by "Ruskin Bond" to ₹500.

37 PVS Computers decided to open a new office at Ernakulum, the office consist of Five Buildings and each contains number of computers. The details are shown below. 5



Distance between the buildings

Building 1 and 2	20 Meters
Building 2 and 3	50 Meters
Building 3 and 4	120 Meters
Building 3 and 5	70 Meters
Building 1 and 5	65 Meters
Building 2 and 5	50 Meters

Number of Computers in

Block	Number of Computers
HR	60
Finance	40
IT	90
Logistics	35

The Company has now decided to connect network in buildings.
I. Suggest the most suitable place (i.e. building) to house the server of this organization.
Also give a reason to justify your suggested location.
II. Where would you place Hub/Switch? Answer with justification.
III. Suggest a cable layout of connection between the buildings (Topology).
IV. Do you think anywhere Repeaters required in the campus? Why
V. Suggest a protocol that shall be needed to provide Video Conferencing solution between Ernakulum Campus and Ranchi Campus.

OR

What type of network (PAN, LAN, MAN, or WAN) will be set up among the computers connected in the Ernakulum campus?

केंद्रीय विद्यालय संगठन , अहमदाबाद संभाग SET - B

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

कक्षा बारहवीं प्री बोर्ड II परीक्षा (2025-26)

PRE-BOARD II Examination for Class XII (2025-26)

Subject: Biology(044)

M.M.-70 **Time: 3 Hours**

General Instructions:

(i) All questions are compulsory.

(ii) The question paper has five sections and 33 questions.

(iii) Section–A has 16 questions of 1 mark each; Section–B has 5 questions of 2 marks each; Section– C has 7 questions of 3 marks each; Section– D has 2 case-based questions of 4 marks each; and Section–E has 3 questions of 5 marks each.

(iv) There is no overall choice. Answer all 33 questions. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.

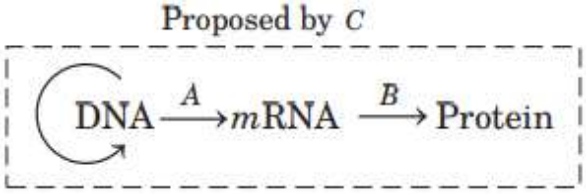
(v) Wherever necessary, neat and properly labeled diagrams should be drawn.

SECTION -A

Q.1 A couple has two daughters. What is the probability that the third child will also be a female? 1

A. 25% B. 50% C. 75% D. 100%

Q.2 The diagram shows an important concept in the genetic implication of DNA. Fill in the blanks A to C. 1



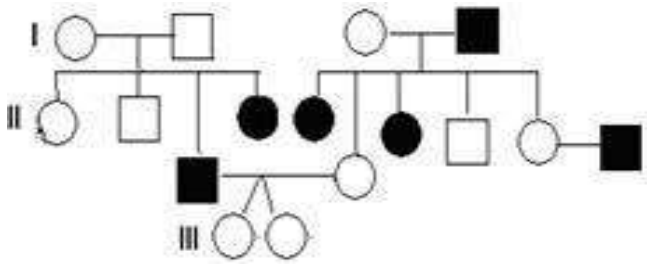
(a) A–transcription, B–replication, C–James Watson

(b) A–translation, B–transcription, C–Erwin Chargaff

(c) A–transcription, B–translation, C–Francis Crick

(d) A–translation, B–extension, C–Rosalind Franklin

Q.3

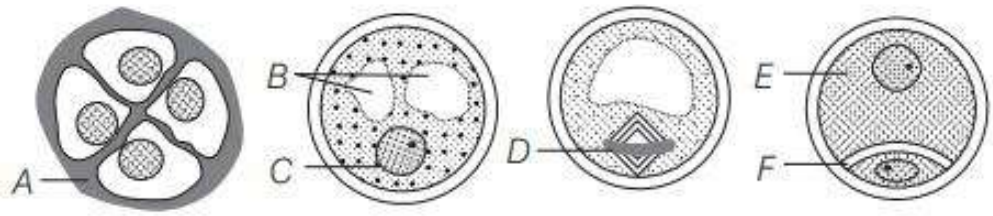


What is the pattern of inheritance in the above pedigree chart?
A. Autosomal dominant B. Autosomal recessive
C. Sex -linked dominant D. Sex -linked recessive

Q.4 Important RNA processing events lead to specialized end sequences in most human mRNAs: 1
(i) at the 5' end, and
(ii) at the 3' end.
(iii)At the 5'end the most distinctive specialized end nucleotide is added,
(iv) sequence of about 200 is added to the 3' end.
A. (i) Initiator codon (ii) Promotor (iii) Terminator codon (iv) Release factors
B. (i). Promotor (ii) Elongation (iii) Regulation (iv) Termination.
C. (i) Capping (ii) Polyadenylation (iii) mGppp (iv) Poly(A).
D. (i) Repressor (ii) Co repressor (iii) Operon (iv) Release factors

Q.5 During parturition, a pregnant woman is having prolonged labour pains and child birth has to be fastened. It is advisable to administer a hormone that can 1
A. increase the metabolic rate. B. release glucose in the blood.
C. stimulate the ovary. D. activate smooth muscles.

Q.6 Identify the structures marked A to F in the given diagram. 1



(a) A–Asymmetric nucleus, B–Nucleus, C–Generative cell, D–Vegetative cell, E–Pollen, F–Pollen tetrad
(b) A–Pollen tetrad, B–Pollen, C–Generative cell, D–Vegetative cell, E–Asymmetric spindle, F–Nucleus
(c) A–Pollen tetrad, B–Vacuole, C–Nucleus, D–Asymmetric spindle, E–Vegetative cell, F–Generative cell
(d) A–Vacuole, B–Nucleus, C–Pollen tetrad, D–Vegetative cell, E–Asymmetric spindle, F–Generative cell

Q.7 The correct sequence of hormone secretion from beginning of menstruation is 1
A. FSH, progesterone, estrogen. B. estrogen, FSH, progesterone.
C. FSH, estrogen, progesterone. D. estrogen, progesterone, FSH.

Q.8 Penetration of the sperm in the ovum is followed by 1
A. formation of first polar body. B. completion of meiosis II.
C. first meiosis. D. dissolution of zona pellucida.

Q.9 Genotypic ratio of 1:2:1 is obtained in a cross between 1
A. AB X AB B. Ab X Ab C. Ab X ab D. ab X ab

Q.10 To produce 400 seeds, the number of meiotic divisions required will be 1
A. 400 B. 200 C. 500 D. 800

Q.11 What contributed to Mendel's success? 1
I. Selection of pureline pea varieties.
II. Knowledge of history.
III. Selecting one character at a time.
IV. Statistical analysis and mathematical logic.
Choose the correct option.
(a) I, II, III and IV (b) II and III
(c) I, III and IV (d) II, III and IV

Q.12 A female undergoing IVF treatment has blocked fallopian tubes. The technique by which the embryo with more than 8 blastomeres will be transferred into the female for further development is 1
A. ZIFT B. GIFT C. IUT D. AI

Question No. 13 to 16 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:
A. Both A and R are true and R is the correct explanation of A
B. Both A and R are true and R is not the correct explanation of A
C. A is true but R is false
D. A is False but R is true

Q.13 Assertion: Biopiracy is the practice of commercially exploiting naturally occurring biochemical or genetic material, especially by obtaining patents that restrict its future use, while failing to pay fair compensation to the community from which it originates. 1
Reason: US patented turmeric and neem which is a case of biopiracy.

Q.14 Assertion (A) A person should be considered reproductively healthy, if he has healthy reproductive organs, but is emotionally imbalanced. Reason (R) It is significant to maintain reproductive health of people and society. 1

Q.15 Assertion (A) Restriction endonucleases are also called 'molecular scissors'. 1
Reason (R) When fragments generated by restriction endonucleases are mixed, they join together due to their sticky ends

Q.16 Assertion:The variation in Rauwolfia growing in different Himalayan ranges might be interms of the potency and concentration of the active chemical (reserpine) that the plantproduces. 1
Reason: A single species might show high diversity at the genetic level over itsdistributionalrange.

SECTION –B

Q.17 Why is proinsulin so called? How is insulin different from it? 2

Q.18 Mention the characteristics of a stable community. 2

Q.19 How do the following help in cancer treatment? 2
i) Alpha interferon
ii) Radiotherapy

Q.20 If a given segment of double-stranded DNA has A+C =60% & guanine is 20%, calculate the % of Thymine in the DNA. 2

Q.21 Draw a neat labelled diagram of a nucleosome. 2

SECTION -C

Q.22 Explain Verhulst-Pearl Logistic Growth of a population. 3

Q.23 What is genetic engineering? List the steps involved in rDNA technology? 3

Q.24 When a garden Pea plant with green pods was cross pollinated with another Pea plant with yellow pods, 50% of the progeny bear green pods. 3

i) Work out the cross to illustrate this.
ii) What do you refer to this type of cross? Why is such a cross done?

Q.25 Give reasons for the following: 3

a) Larger holes are observed in Swiss cheese.
b) Alcoholic content in whisky is more than in beer, although both are made using malted barley and yeast.
C) Nucleo-polyhedro virus can be used effectively in ecological fragile areas.

Q.26 Differentiate between spermatogenesis and oogenesis, with reference to the following aspects: 3

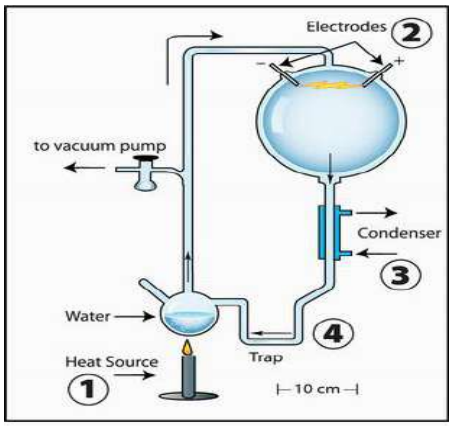
(a) Formation and multiplication of oogonial and spermatogonial cells.
(b) Number of gametes produced from one gamete mother cell.
(c) Completion of the processes.

Q.27 Some allergens trigger sneezing and wheezing in human beings. What causes this type of response by the body? 3

OR

A boy of ten years had chicken-pox. He is not expected to have the same disease for the rest of his life. Mention how it is possible.

Q.28



A.

a.) State the hypothesis which S.L. Miller tried to prove in the laboratory with the help of the set up given above. 3
b.) Name the organic compound observed by him in the liquid water after running the above experiment.
c.) A scientist simulated a similar set up and added CH_4, NH_3 and water vapour at 800 ℃. Which important component is missing in his experiment?

SECTION -D

Q.29 Sewage or municipal waste contains human excreta and other organic wastes. It also contains a number of pathogenic microbes, so should not be passed into rivers, streams and other water bodies. It is made less polluting by passing it through sewage treatment plants (STPs). 4

(a) BOD of two samples of water A and B were 120 mg/L and 400 mg/L respectively. Which sample is more polluted?
(b) Describe the functions of activated sludge in a sewage treatment plant.
(c) Why is sewage water treatment essential?

OR

sludge can be used as an inoculum or as a source of biogas. Explain

Q.30 **Pyramid of numbers :-** 4

It shows the number of individuals per unit area at each trophic level. It is usually upright, e.g. in grasslands, however, in a parasitic food chain, a single plant may support the growth of many herbivores and each herbivore in turn may provide nutrition to several parasites, which support many hyperparasites.

Pyramid of biomass:-

It is the representation of the total biomass present (sequence wise) per unit area at different trophic levels. Pyramid of biomass is upright for grassland and forest ecosystems. In a pond, the producers are small organisms, their biomass is least, and this value gradually shows an increase towards the apex of the pyramid, thus making the pyramid of biomass inverted in shape.

(a) Why the pyramid of energy is always upright? Explain.
(b) Construct an ideal pyramid of energy when 1,000,000 joules of sunlight is available. Label all its trophic levels.(four trophic levels)
(c) Write any two limitations of ecological pyramids.

OR

Explain the significance of ecological pyramid with the help of an example.

SECTION -E

Q.31 Trace the development of a megaspore mother cell of a flower into a mature ovule. Give a labeled diagram of the final stage. 5

OR

Describe oogenesis in a human female? What promotes the completion of second meiotic division in oogenesis?

Q.32 (a) How many codons code for amino acids and how many do not? 5

(b) Explain the following giving one example of each:
(i) specific codon
(ii) degenerate codon
(iii) universal codon
(iv) initiator codon.

OR

(a) Why is tRNA called an adaptor?

(b) Draw and label a secondary structure of tRNA. How does the actual structure of tRNA look like?

Q.33 Name the components a bioreactor must possess to achieve the desired product? 5
What is Bioreactor? What are the advantages of Stirred tank Bioreactor over Shake flask. Show diagrammatically a simple Stirred tank Bioreactor?

OR

What are Restriction enzyme? Why do bacteria have these restriction enzymes. Show diagrammatically a restriction enzyme its recognition & the product it produces?

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केंद्रीय विद्यालय संगठन , अहमदाबाद संभाग SET - A

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

कक्षा बारहवीं प्री बोर्ड II परीक्षा (2025-26)

PRE-BOARD II Examination for Class XII (2025-26)

Subject: Biology (044)

M.M.-70 **Time: 3 Hours**

General Instructions:

(i) All questions are compulsory.

(ii) The question paper has five sections and 33 questions.

(iii) Section–A has 16 questions of 1 mark each; Section–B has 5 questions of 2 marks each; Section– C has 7 questions of 3 marks each; Section– D has 2 case-based questions of 4 marks each; and Section–E has 3 questions of 5 marks each.

(iv) There is no overall choice. Answer all 33 questions. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.

(v) Wherever necessary, neat and properly labeled diagrams should be drawn.

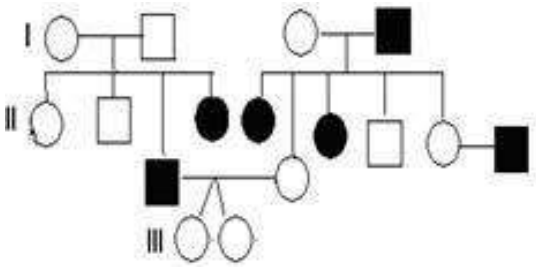
SECTION –A

Q.1 Important RNA processing events lead to specialized end sequences in most human mRNAs: 1

(i) at the 5’ end, and
(ii) at the 3’ end.
(iii)At the 5’end the most distinctive specialized end nucleotide is added,
(iv) sequence of about 200 is added to the 3’ end.

A. (i) Initiator codon (ii) Promotor (iii) Terminator codon (iv) Release factors
B. (i). Promotor (ii) Elongation (iii) Regulation (iv) Termination.
C. (i) Capping (ii) Polyadenylation (iii) mGppp (iv) Poly(A).
D. (i) Repressor (ii) Co repressor (iii) Operon (iv) Release factors

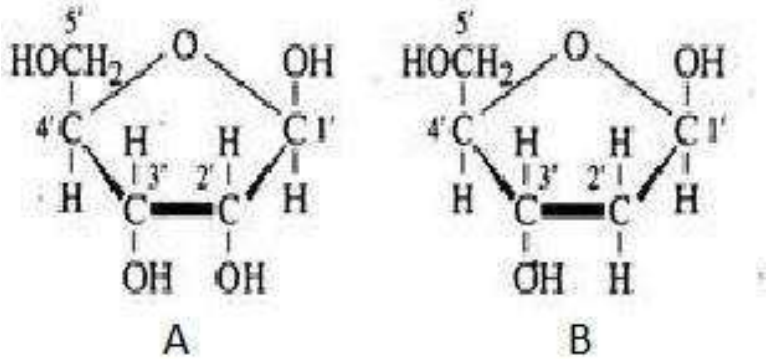
Q.2 1



What is the pattern of inheritance in the above pedigree chart?

A. Autosomal dominant
B. Autosomal recessive
C. Sex -linked dominant
D. Sex -linked recessive

Q.3 Observe structures A and B given below. Which of the following statements are correct? 1



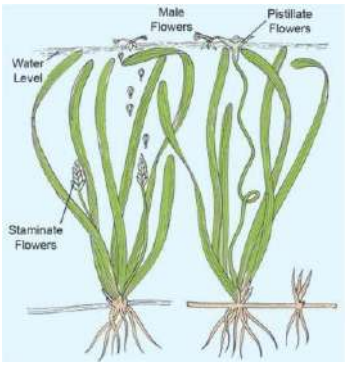
A. A is having 2′-OH group which makes it less reactive and structurally stable, whereas B is having 2′-H group which makes it more reactive and unstable.
B. A is having 2′-OH group which makes it more reactive and structurally unstable, whereas B is having 2′-H group which makes it less reactive and structurally stable.
C. A and B both have -OH groups which make it more reactive and structurally stable.
D. A and B both are having -OH groups which make it less reactive and structurally stable

Q.4 A couple has two daughters. What is the probability that the third child will also be a female? 1
A. 25% B. 50% C. 75% D. 100%

Q.5 Penetration of the sperm in the ovum is followed by 1
A. formation of first polar body. B. completion of meiosis II.
C. first meiosis. D. dissolution of zona pellucida.

Q.6 The correct sequence of hormone secretion from beginning of menstruation is 1
A. FSH, progesterone, estrogen. B. estrogen, FSH, progesterone.
C. FSH, estrogen, progesterone. D. estrogen, progesterone, FSH.

Q.7 In the dioecious aquatic plant shown, identify the characteristics of the male flowers that reach the female flowers for pollination: 1



	Size of the flower	Colour of flower	Characteristic feature of pollengrain
A	small	brightly coloured	Light weight and non-sticky
B	large	colourless	large and sticky
C	small	white	small, covered with mucilage
D	large	colourless	non sticky

Q.8 During parturition, a pregnant woman is having prolonged labour pains and child birth has to be fastened. It is advisable to administer a hormone that can 1
A. increase the metabolic rate. B. release glucose in the blood.
C. stimulate the ovary. D. activate smooth muscles.

Q.9 A female undergoing IVF treatment has blocked fallopian tubes. The technique by which the embryo with more than 8 blastomeres will be transferred into the female for further development is 1
A. ZIFT B. GIFT C. IUT D. AI

Q.10 What contributed to Mendel's success? 1
I. Selection of pureline pea varieties.
II. Knowledge of history.
III. Selecting one character at a time.
IV. Statistical analysis and mathematical logic.
Choose the correct option.
(a) I, II, III and IV (b) II and III
(c) I, III and IV (d) II, III and IV

Q.11 To produce 400 seeds, the number of meiotic divisions required will be 1
A. 400 B. 200 C. 500 D. 800

Q.12 Genotypic ratio of 1:2:1 is obtained in a cross between 1
A. AB X AB B. Ab X Ab C. Ab X ab D. ab X ab

Question No. 13 to 16 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:
A. Both A and R are true and R is the correct explanation of A
B. Both A and R are true and R is not the correct explanation of A
C. A is true but R is false
D. A is False but R is true

Q.13 Assertion:The variation in Rauwolfia growing in different Himalayan ranges might be in terms of the potency and concentration of the active chemical (reserpine) that the plant produces. 1
Reason: A single species might show high diversity at the genetic level over its distributional range.

Q.14 Assertion (A): Restriction endonucleases are also called 'molecular scissors'. 1
Reason (R): When fragments generated by restriction endonucleases are mixed, they join together due to their sticky ends

Q.15 Assertion (A): A person should be considered reproductively healthy, if he has healthy reproductive organs, but is emotionally imbalanced. 1
Reason (R): It is significant to maintain reproductive health of people and society.

Q.16 Assertion: Biopiracy is the practice of commercially exploiting naturally occurring biochemical or genetic material, especially by obtaining patents that restrict its future use, while failing to pay fair compensation to the community from which it originates. 1
Reason: US patented turmeric and neem which is a case of biopiracy.

SECTION -B

Q.17 Draw a neat labelled diagram of a nucleosome. 2

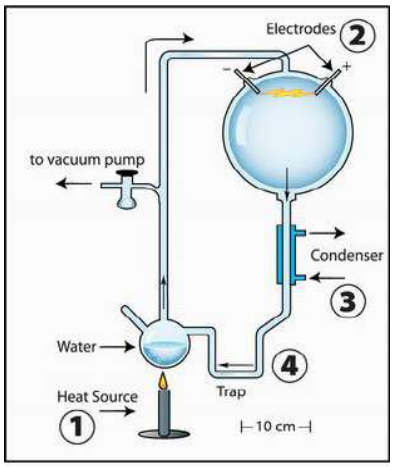
Q.18 If a given segment of double-stranded DNA has A+C =60% & guanine is 20%, calculate the % of Thymine in the DNA. 2

Q.19 How do the following help in cancer treatment? 2
i) Alpha interferon ii) Radiotherapy

Q.20 Mention the characteristics of a stable community. 2

Q.21 Why is proinsulin so called? How is insulin different from it? 2

SECTION –C

Q.22 

A.

a.) State the hypothesis which S.L. Miller tried to prove in the laboratory with the help of the set up given above. 3

b.) Name the organic compound observed by him in the liquid water after running the above experiment.

c.) A scientist simulated a similar set up and added CH_4, NH_3 and water vapour at 800 ℃. Which important component is missing in his experiment?

Q.23 Some allergens trigger sneezing and wheezing in human beings. What causes this type of response by the body? 3

OR

A boy of ten years had chicken-pox. He is not expected to have the same disease for the rest of his life. Mention how it is possible.

Q.24 Differentiate between spermatogenesis and oogenesis, with reference to the following aspects: 3
(a) Formation and multiplication of oogonial and spermatogonial cells.
(b) Number of gametes produced from one gamete mother cell.
(c) Completion of the processes.

Q.25 Give reasons for the following: 3
a) Larger holes are observed in Swiss cheese.
b) Alcoholic content in whisky is more than in beer, although both are made using malted barley and yeast.
C) Nucleo-polyhedro virus can be used effectively in ecological fragile areas.

Q.26 When a garden Pea plant with green pods was cross pollinated with another Pea plant with yellow pods, 50% of the progeny bear green pods. 3

i)Work out the cross to illustrate this.

ii)What do you refer to this type of cross? Why is such a cross done?

Q.27 What is genetic engineering? List the steps involved in rDNA technology? 3

Q.28 Explain Verhulst-Pearl Logistic Growth of a population. 3

SECTION -D

Q.29 Sewage or municipal waste contains human excreta and other organic wastes. It also contains a number of pathogenic microbes, so should not be passed into rivers, streams and other water bodies. It is made less polluting by passing it through sewage treatment plants (STPs). 4

(a) BOD of two samples of water A and B were 120 mg/L and 400 mg/L respectively. Which sample is more polluted?
(b) Describe the functions of activated sludge in a sewage treatment plant.
(c) Why is sewage water treatment essential?

OR

sludge can be used as an inoculum or as a source of biogas. Explain

Q.30 **Pyramid of numbers :-** 4

It shows the number of individuals per unit area at each trophic level. It is usually upright, e.g. in grasslands, however, in a parasitic food chain, a single plant may support the growth of many herbivores and each herbivore in turn may provide nutrition to several parasites, which support many hyperparasites.

Pyramid of biomass:-

It is the representation of the total biomass present (sequence wise) per unit area at different trophic levels. Pyramid of biomass is upright for grassland and forest ecosystems. In a pond, the producers are small organisms, their biomass is least, and this value gradually shows an increase towards the apex of the pyramid, thus making the pyramid of biomass inverted in shape.

(a) Why the pyramid of energy is always upright? Explain.
(b) Construct an ideal pyramid of energy when 1,000,000 joules of sunlight is available. Label all its trophic levels.(four trophic levels)
(c) Write any two limitations of ecological pyramids.

OR

Explain the significance of ecological pyramid with the help of an example.

SECTION -E

Q.31 Trace the development of a megaspore mother cell of a flower into a mature ovule. Give a labeled diagram of the final stage. 5

OR

Describe oogenesis in a human female? What promotes the completion of second meiotic division in oogenesis?

Q.32 (a) How many codons code for amino acids and how many do not? 5
(b) Explain the following giving one example of each:
(i) specific codon
(ii) degenerate codon
(iii) universal codon
(iv) initiator codon.

OR

(a) Why is tRNA called an adaptor?
(b) Draw and label a secondary structure of tRNA. How does the actual structure of tRNA look like?

Q.33 Name the components a bioreactor must possess to achieve the desired product? What is Bioreactor? What are the advantages of Stirred tank Bioreactor over Shake flask. Show diagrammatically a simple Stirred tank Bioreactor? 5

OR

What is Restriction enzyme? Why do bacteria have these restriction enzymes. Show diagrammatically a restriction enzyme its recognition & the product it produces?

SET B

केंद्रीय विद्यालय संगठन,अहमदाबाद संभाग

Kendriya Vidyalaya Sangathan, Ahmedabad Region

कक्षा बारहवीं प्री-बोर्ड - द्वितीय परीक्षा 2025-26

PRE-BOARD II EXAMINATION 2025-26 for Class XII

SUBJECT: CHEMISTRY (043)

M.M.: 70 **TIME: 3 Hours**

सामान्य निर्देश **/GENERAL INSTRUCTIONS:**

1. There are 33 questions in this question paper with internal choice.
2. Section A consists of 16 multiple -choice questions carrying 1 mark each.
3. Section B consists of 5 short answer questions carrying 2 marks each.
4. Section C consists of 7 short answer questions carrying 3 marks each.
5. Section D consists of 2 case - based questions carrying 4 marks each.
6. Section E consists of 3 long answer questions carrying 5 marks each.
7. All questions are compulsory.
8. Use of log tables and calculators is not allowed. Required log values are given below-

(antilog 0.53=3.41**,** antilog 0.167=1.47, log 3 =0.47, log 5=0.7, log7 =0.84, log2= 0.30)

SECTION A

The following questions are multiple -choice questions with one correct answer. Each question carries 1 mark. There is no internal choice in this section.

1 Molecule whose mirror image is non-superimposable over them are known as optical isomers. Which of the following molecules is chiral in nature?

(a) 2 – bromobutane (b) 1 – bromo–3–methyl butane

(c) 3 – Bromo pentane (d)2 – bromo propan –2–ol

2 For the best yield of ether from Williamson"s synthesis, the alkyl halide should preferable be:

(a) Secondary (b) Primary

(c) Tertiary (d) All

3 What is the decreasing order of the basicity of 1°, 2° and 3° amines and ammonia in gaseous phase?

(a) $NH_3 > C_2H_5NH_2 > (C_2H_5)_2NH > (C_2H_5)_3N$

(b) $(C_2H_5)_3N > (C_2H_5)_2NH > C_2H_5NH_2 > NH_3$

(c) $(C_2H_5)_2NH > C_2H_5NH_2 > (C_2H_5)_3N > NH_3$

(d) $(C_2H_5)_2NH > (C_2H_5)_3N > C_2H_5NH_2 > NH_3$

4 $RMgX + CO_2 \rightarrow$ **X** Hydrolysis $\rightarrow$ **Y** ; **'Y'** in the above reaction is?

(a) RCOOR (b) RCHO

(c) RCOOH (d) RCOOR

5 Glucose reacts with hydroxylamine to form an oxime. This confirms the presence of:

(a) secondary alcoholic group (b) straight chain of six carbon atoms

(c) primary alcoholic group (d) carbonyl group

6 Vitamin B_6 is :

(a) Riboflavin (b) Ascorbic acid

(c) Thiamine (d) Pyridoxine

7 Why alkyl halides are considered to be very reactive compounds towards nucleophile?

(a) they have an electrophilic carbon & a good leaving group

(b) they have a nucleophilic carbon & a good leaving group

(c) they have a nucleophilic carbon & a bad leaving group

(d) they have an electrophilic carbon & a bad leaving group

8 The quantity of charge required to obtain two mole of aluminium from Al_2O_3 is…….

(a) 1 F (b) 2 F

(c) 3 F (d) 6 F

9 Magnetic moments (BM) of transition elements 1,2,3 and 4 are:

1	2	3	4
2.84	4.90	5.92	3.87

(a) $1=Ti^{2+}$, $2=Cr^{2+}$, $3=Mn^{2+}$, $4=V^{2+}$

(b) $1=Ti^{2+}$, $2=Mn^{2+}$, $3=Cr^{2+}$, $4=V^{2+}$

(c) $1=V^{2+}$, $2=Cr^{2+}$, $3=Mn^{2+}$, $4=Ti^{2+}$

(d) $1=Ti^{2+}$, $2=Cr^{2+}$, $3=V^{2+}$, $4=Mn^{2+}$

10 Zr and Hf have almost equal atomic and ionic radii because of

(a) diagonal relationship (b) actinoid contraction

(c) lanthanoid contraction (d) belonging to the same group

11 What are the units of k for the rate law: Rate = $k[A][B]^0$, when the concentration unit is mol/L?

(a) $L\ mol^{-1}\ s^{-1}$ (b) $L^2\ mol^{-2}\ s^{-1}$

(c) s^{-1} (d) $L^{-1}\ mol\ s^{-1}$

12 In comparison to a 0.01 M solution of glucose, the elevation in boiling point of a 0.01 M $MgCl_2$ solution is :-

(a) Same (b) about twice

(c) about three times (d) about four times.

Question number 13-16 are of assertion–reason type questions. Select the most appropriate answer from the options given below:

(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.

13 **Assertion:** A solution of acetone and chloroform has lower vapour pressure than that of pure components.

Reason: Acetone and chloroform forms intermolecular hydrogen bond in the solution.

14 **Assertion:** Secondary cells are used in invertors.

Reason: A primary cell can be recharged by passing current through it in the opposite direction after it has been used.

15 **Assertion**: SN_2 reaction of an optically active alkyl halide with an aqueous solution of KOH always gives an alcohol with opposite sign of rotation.

Reason: SN_1 reactions always proceed with racemisation.

16 **Assertion**: Decomposition of ammonia on a hot Pt surface is a zero reaction.

Reason: Rate of the reaction depends on concentration of ammonia

SECTION B

This section contains 5 questions with internal choice in one question. These questions are very short answer type and carry 2 marks each.

17 (i) Arrange the following in the increasing order of boiling point
0.1M $Al_2(SO_4)_3$, 0.1M KCl, 0.1M Glucose, 0.1M $[Co(NH_3)_6]Cl_3$

(ii) What happens when blood cells are kept in 0.2% NaCl solution.

18 Write the following reactions:
(a) Cannizzaro reaction of Benzaldehyde (b) Aldol condensation of Ethanal

19 (i) Write chemical equation for the following conversions:
$CH_3 –CH_2 –Cl$ into $CH_3 –CH_2 –CH_2 –NH_2$

(ii) Write structures and IUPAC names of the amide which gives ethanamine by Hoffmann bromamide reaction.

20 Explain giving reasons:
(i) Transition metals and many of their compounds show paramagnetic behaviour.
(ii) The enthalpies of atomisation of the transition metals are high.

OR

Explain giving reasons:
(i) The transition metals generally form coloured compounds.
(ii) Transition metals and their many compounds act as good catalyst

21 Determine the amount of $CaCl_2$ (i = 2.47) dissolved in 2.5 litre of water such that its osmotic pressure is 0.75 atm at 27° C

SECTION C

This section contains 7 questions with internal choice in one question. These questions are short answer type and carry 3 marks each.

22 (i) Write the formulas for the following coordination compound:
(a) tetraamminediaquacobalt(III) chloride
(b) tris(ethane–1,2–diamine) chromium(III) chloride

(ii) Explain on the basis of valence bond theory that $[Ni(CN)_4]^{2-}$ ion with square planar structure is diamagnetic and the $[NiCl_4]^{2-}$ ion with tetrahedral geometry is paramagnetic.

23 (i) How will you convert 4-nitrotoluene to 2-bromobenzoic acid ?

(ii) Although amino group is o– and p– directing in aromatic electrophilic substitution reactions, aniline on nitration gives a substantial amount of m-nitroaniline

24 (i) Describe the preparation of potassium dichromate from iron chromite ore.

(ii) What is the effect of increasing pH on a solution of potassium dichromate?

25 2 g of benzoic acid (C_6H_5COOH) dissolved in 25 g of benzene shows a depression in freezing point equal to 1.62 K. Molal depression constant for benzene is 4.9 K kg mol^{-1}. What is the percentage association of acid if it forms dimer in solution?

26 (i) Write the equations involved in the following reactions:
(a) Reimer - Tiemann reaction (b) Kolbe's reaction

(ii) Show how will you synthesise 1-phenylethanol from a suitable alkene.

27 Determine the values of equilibrium constant (K_c) and ΔG° for the following reaction
$Ni(s) + 2Ag^+(aq) \rightarrow Ni^{2+}(aq) + 2Ag(s)$, E° = 1.05 V

OR

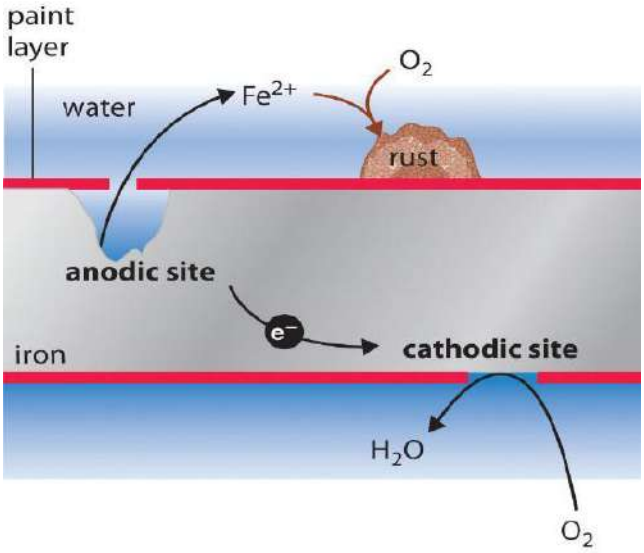
Define conductivity. Explain the variation of conductivity and molar conductivity with concentration. Also draw the graph.

28 Explain why
(i) the dipole moment of chlorobenzene is lower than that of cyclohexyl chloride? (ii) alkyl halides, though polar, are immiscible with water?
(iii) Grignard reagents should be prepared under anhydrous conditions?

SECTION D

The following questions are case -based questions. Each question has an internal choice and carries 4 (1+1+2) marks each. Read the passage carefully and answer the questions that follow.

29 **"Electrochemical Cells and Corrosion"**



An electrochemical cell consists of zinc and copper electrodes. The cell notation is:
$Zn(s) \mid Zn^{2+}(aq, 1\ M) \mid\mid Cu^{2+}(aq, 1\ M) \mid Cu(s)$
The standard reduction potentials are:
$E°(Zn^{2+}/Zn) = -0.76\ V$, $E°(Cu^{2+}/Cu) = +0.34\ V$
Corrosion slowly coats the surfaces of metallic objects with oxides or other salts of the metal. The rusting of iron, tarnishing of silver, development of green coating on copper and bronze are some of the examples of corrosion.
In corrosion, a metal is oxidised by loss of electrons to oxygen and formation of oxides. Corrosion of iron occurs in presence of water and air. The chemistry of corrosion is quite complex but it may be considered essentially as an electrochemical phenomenon.
Electrons released at anodic spot move through the metal and go to another spot on the metal and reduce oxygen in the presence of H^+ (which is believed to be available from H_2CO_3 formed due to dissolution of carbon dioxide from air into water. Hydrogen ion in water may also be available due to dissolution of other acidic oxides from the atmosphere). This spot behaves as cathode with the reaction
Prevention of corrosion is of prime importance. It not only saves money but also helps in preventing accidents such as a bridge collapse or failure of a key component due to corrosion. One of the simplest methods of preventing corrosion is to prevent the surface of the metallic object to come in contact with atmosphere
Zinc metal is used to prevent corrosion of iron by galvanization. The protection is based on the principle of a more active metal preventing corrosion of a less active one.

i Write the cell reaction and calculate the EMF of the cell.

OR

Write the chemical equation occurs at anode and cathode during rusting of iron.

ii Write the formula of rust.

iii Explain how zinc prevents corrosion of iron.

30 **"Importance of Coordination Compounds"**

The coordination compounds are of great importance. These compounds are widely present in the mineral, plant and animal worlds. Coordination compounds find use in many qualitative and quantitative chemical analysis. The familiar colour reactions given by metal ions with a number of ligands (especially chelating ligands), as a result of formation of coordination entities, form the basis for their detection and estimation by classical and instrumental methods of analysis. Some important extraction processes of metals, like those of silver and gold, make use of complex formation.

Coordination compounds are of great importance in biological systems. The pigment responsible for photosynthesis, chlorophyll, is a coordination compound of magnesium. Haemoglobin, the red pigment of blood which acts as oxygen carrier is a coordination compound of iron. Vitamin B_{12}.

Coordination compounds are used as catalysts for many industrial processes. Examples include rhodium complex, a Wilkinson catalyst, is used for the hydrogenation of alkenes.

Cisplatin is a coordination compound used as an anticancer drug. It binds to DNA, causing cells to stop dividing. The compound trans-platin, however, is not effective as an anticancer drug.

i Write the formula of Wilkinson catalyst.

ii Write the IUPAC name of cisplatin.

iii Which type if isomerism is shown by Cisplatin. Draw the isomers of Cisplatin.

OR

Why is the cis form effective while trans form is not?

SECTION E

The following questions are long answer type and carry 5 marks each. All questions have an internal choice

31 i Define the order of reaction.

ii For a first order reaction, show that time required for 99% completion is twice the time required for the completion of 90% of reaction.

iii The activation energy for the reaction
$2\ HI(g) \rightarrow H_2 + I_2\ (g)$ is 209.5 kJ mol^{-1} at 581K.Calculate the fraction of molecules of reactants having energy equal to or greater than activation energy?

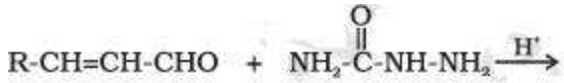
OR

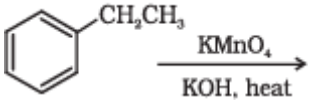
i Define collision frequency.

ii Show that in a first order reaction, time required for completion of 99.9% is 10 times of half-life ($t_{1/2}$) of the reaction.

iii The rate of a reaction quadruples when the temperature changes from 293 K to 313 K. Calculate the energy of activation of the reaction assuming that it does not change with temperature.

32 i Complete the following reactions-

(a) 

(b) 

ii An organic compound (A) with molecular formula C8H8O forms an orange-red precipitate with 2,4-DNP reagent and gives yellow precipitate on heating with iodine in the presence of sodium hydroxide. It neither reduces Tollens' or Fehlings' reagent, nor does it decolourise bromine water or Baeyer's reagent. On drastic oxidation with chromic acid, it gives a carboxylic acid (B) having molecular formula $C_7H_6O_2$. Identify the compounds (A) and (B) and explain the reactions involved.

OR

i Write product and name of reaction involved, when ethanoic acid heated with concentrated Br_2 in presence of red phosphorous.

ii Write suitable chemical test to distinguish benzaldehyde and propanal.

iii An organic compound with the molecular formula $C_9H_{10}O$ forms 2,4-DNP derivative, reduces Tollens' reagent and undergoes Cannizzaro reaction. On vigorous oxidation, it gives 1,2-benzenedicarboxylic acid. Identify the compound and write the chemical reactions involved.

33 i What happens when D-glucose is treated with the following reagents?
(a) HI (b) Bromine water (c) HNO_3 (Write the reactions also)

ii What are the hydrolysis products of (a) sucrose and (b) lactose?

OR

i What is the basic structural difference between starch and cellulose?

ii Why sucrose is reducing sugar whereas maltose is reducing although both are disaccharides.

iii What is the difference between a nucleoside and a nucleotide?

iv Enumerate the reactions of D-glucose which cannot be explained by its open chain structure (Any two)

****

SET A

केंद्रीय विद्यालय संगठन,अहमदाबाद संभाग

Kendriya Vidyalaya Sangathan, Ahmedabad Region

कक्षा बारहवीं प्री-बोर्ड - द्वितीय परीक्षा 2025-26

PRE-BOARD II EXAMINATION 2025-26 for Class XII

SUBJECT: CHEMISTRY (043)

M.M.: 70 **TIME: 3 Hours**

सामान्य निर्देश **/GENERAL INSTRUCTIONS:**

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6. Section E consists of 3 long answer questions carrying 5 marks each.
7. All questions are compulsory.
8. Use of log tables and calculators is not allowed. Required log values are given below-

(antilog 0.53=3.41**,** antilog 0.167=1.47, log 3 =0.47, log 5=0.7, log7 =0.84, log2= 0.30)

SECTION A

The following questions are multiple -choice questions with one correct answer. Each question carries 1 mark. There is no internal choice in this section.

1 Molecule whose mirror image is non-superimposable over them are known as optical isomers. Which of the following molecules is chiral in nature?
(a) 1 – bromo–3–methyl butane (b) 2 – bromobutane
(c) 3 – Bromo pentane (d)2 – bromo propan –2–ol

2 For the best yield of ether from Williamson"s synthesis, the alkyl halide should preferable be:
(a) Primary (b) Secondary
(c) Tertiary (d) All

3 What is the decreasing order of the basicity of 1°, 2° and 3° amines and ammonia in aqueous medium?
(a) $NH_3 > C_2H_5NH_2 > (C_2H_5)_2NH > (C_2H_5)_3N$
(b) $(C_2H_5)_3N > (C_2H_5)_2NH > C_2H_5NH_2 > NH_3$
(c) $(C_2H_5)_2NH > C_2H_5NH_2 > (C_2H_5)_3N > NH_3$
(d) $(C_2H_5)_2NH > (C_2H_5)_3N > C_2H_5NH_2 > NH_3$

4 $RMgX + CO_2 \rightarrow$ **X** Hydrolysis $\rightarrow$ **Y** ; **'Y'** in the above reaction is?
(a) RCOOH (b) RCHO
(c) RCOR (d) RCOOR

5 Glucose reacts with hydroxylamine to form an oxime. This confirms the presence of:
(a) carbonyl group (b) straight chain of six carbon atoms
(c) primary alcoholic group (d) secondary alcoholic group

6 Vitamin B_2 is :

(a) Riboflavin (b) Ascorbic acid

(c) Thiamine (d) Pyridoxine

7 Why alkyl halides are considered to be very reactive compounds towards nucleophile?

(a) they have an electrophilic carbon & a bad leaving group

(b) they have a nucleophilic carbon & a good leaving group

(c) they have a nucleophilic carbon & a bad leaving group

(d) they have an electrophilic carbon & a good leaving group

8 The quantity of charge required to obtain one mole of aluminium from Al_2O_3 is…….

(a) 1 F (b) 2 F

(c) 3 F (d) 6 F

9 Magnetic moments (BM) of transition elements 1,2,3 and 4 are:

1	2	3	4
2.84	4.90	5.92	3.87

(a) $1=Ti^{2+}$, $2=Cr^{2+}$, $3=Mn^{2+}$, $4=V^{2+}$

(b) $1=Ti^{2+}$, $2=Mn^{2+}$, $3=Cr^{2+}$, $4=V^{2+}$

(c) $1=V^{2+}$, $2=Cr^{2+}$, $3=Mn^{2+}$, $4=Ti^{2+}$

(d) $1=Ti^{2+}$, $2=Cr^{2+}$, $3=V^{2+}$, $4=Mn^{2+}$

10 Zr and Hf have almost equal atomic and ionic radii because of

(a) diagonal relationship (b) lanthanoid contraction

(c) actinoid contraction (d) belonging to the same group

11 What are the units of k for the rate law: Rate = $k[A][B]^2$, when the concentration unit is mol/L?

(a) $L\ mol^{-1}\ s^{-1}$ (b) $L^2\ mol^{-2}\ s^{-1}$

(c) s^{-1} (d) $L^{-1}\ mol\ s^{-1}$

12 In comparison to a 0.01 M solution of glucose, the elevation in boiling point of a 0.01 M $AlCl_3$ solution is :-

(a) Same (b) about twice

(c) about three times (d) about four times.

Question number 13-16 are of assertion–reason type questions. Select the most appropriate answer from the options given below:

(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.

13 **Assertion:** Decomposition of ammonia on a hot Pt surface is a zero reaction.

Reason: Rate of the reaction depends on concentration of ammonia.

14 **Assertion:** Secondary cells are used in invertors.

Reason: A primary cell can be recharged by passing current through it in the opposite direction after it has been used.

15 **Assertion**: SN_2 reaction of an optically active aryl halide with an aqueous solution of KOH always gives an alcohol with opposite sign of rotation.

Reason: SN_2 reactions always proceed with inversion of configuration.

16 **Assertion**: A solution of acetone and chloroform has lower vapour pressure than that of pure components.

Reason: Acetone and chloroform forms intramolecular hydrogen bond in the solution.

SECTION B

This section contains 5 questions with internal choice in one question. These questions are very short answer type and carry 2 marks each.

17 (i) Arrange the following in the increasing order of boiling point
0.1M $Al_2(SO_4)_3$, 0.1M KCl, 0.1M Glucose, 0.1M $[Co(NH_3)_6]Cl_3$

(ii) What happens when blood cells are kept in 0.2% NaCl solution.

18 Write the following reactions:
(a) Cannizzaro reaction of Benzaldehyde (b) Aldol condensation of Ethanal

19 (i) Write chemical equation for the following conversions:
$CH_3 –CH_2 –Cl$ into $CH_3 –CH_2 –CH_2 –NH_2$

(ii) Write structures and IUPAC names of the amide which gives ethanamine by Hoffmann bromamide reaction.

20 Explain giving reasons:
(i) Transition metals and many of their compounds show paramagnetic behaviour.
(ii) The enthalpies of atomisation of the transition metals are high.

OR

Explain giving reasons:
(i) The transition metals generally form coloured compounds.
(ii) Transition metals and their many compounds act as good catalyst

21 Determine the amount of $CaCl_2$ (i = 2.47) dissolved in 2.5 litre of water such that its osmotic pressure is 0.75 atm at 27° C

SECTION C

This section contains 7 questions with internal choice in one question. These questions are short answer type and carry 3 marks each.

22 (i) Write the formulas for the following coordination compound:
(a) tetraamminediaquacobalt(III) chloride
(b) tris(ethane–1,2–diamine) chromium(III) chloride

(ii) Explain on the basis of valence bond theory that $[Ni(CN)_4]^{2-}$ ion with square planar structure is diamagnetic and the $[NiCl_4]^{2-}$ ion with tetrahedral geometry is paramagnetic.

23 (i) How will you convert 4-nitrotoluene to 2-bromobenzoic acid ?

(ii) Although amino group is o– and p– directing in aromatic electrophilic substitution reactions, aniline on nitration gives a substantial amount of m-nitroaniline

24 (i) Describe the preparation of potassium dichromate from iron chromite ore.

(ii) What is the effect of increasing pH on a solution of potassium dichromate?

25 2 g of benzoic acid (C_6H_5COOH) dissolved in 25 g of benzene shows a depression in freezing point equal to 1.62 K. Molal depression constant for benzene is 4.9 K kg mol^{-1}. What is the percentage association of acid if it forms dimer in solution?

26 (i) Write the equations involved in the following reactions:
(a) Reimer - Tiemann reaction (b) Kolbe's reaction

(ii) Show how will you synthesise 1-phenylethanol from a suitable alkene.

27 Determine the values of equilibrium constant (K_c) and ΔG° for the following reaction
$Ni(s) + 2Ag^+(aq) \rightarrow Ni^{2+}(aq) + 2Ag(s)$, E° = 1.05 V

OR

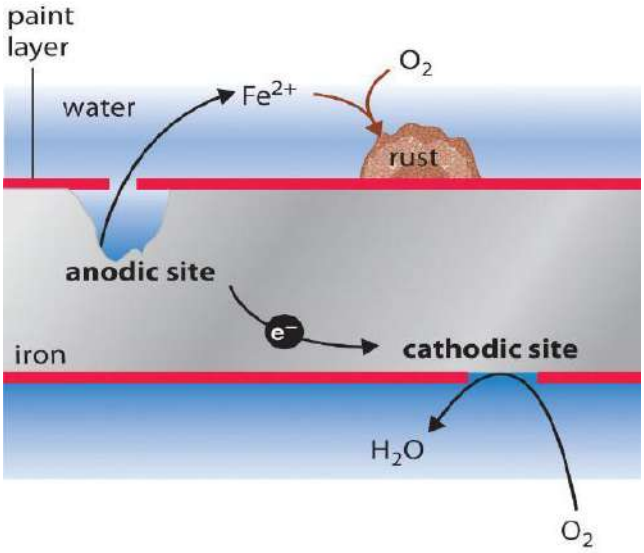
Define conductivity. Explain the variation of conductivity and molar conductivity with concentration. Also draw the graph.

28 Explain why
(i) the dipole moment of chlorobenzene is lower than that of cyclohexyl chloride? (ii) alkyl halides, though polar, are immiscible with water?
(iii) Grignard reagents should be prepared under anhydrous conditions?

SECTION D

The following questions are case -based questions. Each question has an internal choice and carries 4 (1+1+2) marks each. Read the passage carefully and answer the questions that follow.

29 **"Electrochemical Cells and Corrosion"**



An electrochemical cell consists of zinc and copper electrodes. The cell notation is:
$Zn(s) \mid Zn^{2+}(aq, 1\ M) \mid\mid Cu^{2+}(aq, 1\ M) \mid Cu(s)$
The standard reduction potentials are:
$E°(Zn^{2+}/Zn) = -0.76\ V$, $E°(Cu^{2+}/Cu) = +0.34\ V$
Corrosion slowly coats the surfaces of metallic objects with oxides or other salts of the metal. The rusting of iron, tarnishing of silver, development of green coating on copper and bronze are some of the examples of corrosion.
In corrosion, a metal is oxidised by loss of electrons to oxygen and formation of oxides. Corrosion of iron occurs in presence of water and air. The chemistry of corrosion is quite complex but it may be considered essentially as an electrochemical phenomenon.
Electrons released at anodic spot move through the metal and go to another spot on the metal and reduce oxygen in the presence of H^+ (which is believed to be available from H_2CO_3 formed due to dissolution of carbon dioxide from air into water. Hydrogen ion in water may also be available due to dissolution of other acidic oxides from the atmosphere). This spot behaves as cathode with the reaction
Prevention of corrosion is of prime importance. It not only saves money but also helps in preventing accidents such as a bridge collapse or failure of a key component due to corrosion. One of the simplest methods of preventing corrosion is to prevent the surface of the metallic object to come in contact with atmosphere
Zinc metal is used to prevent corrosion of iron by galvanization. The protection is based on the principle of a more active metal preventing corrosion of a less active one.

i Write the cell reaction and calculate the EMF of the cell.

OR

Write the chemical equation occurs at anode and cathode during rusting of iron.

ii Write the formula of rust.

iii Explain how zinc prevents corrosion of iron.

30 **"Importance of Coordination Compounds"**

The coordination compounds are of great importance. These compounds are widely present in the mineral, plant and animal worlds. Coordination compounds find use in many qualitative and quantitative chemical analysis. The familiar colour reactions given by metal ions with a number of ligands (especially chelating ligands), as a result of formation of coordination entities, form the basis for their detection and estimation by classical and instrumental methods of analysis. Some important extraction processes of metals, like those of silver and gold, make use of complex formation.

Coordination compounds are of great importance in biological systems. The pigment responsible for photosynthesis, chlorophyll, is a coordination compound of magnesium. Haemoglobin, the red pigment of blood which acts as oxygen carrier is a coordination compound of iron. Vitamin B_{12}.

Coordination compounds are used as catalysts for many industrial processes. Examples include rhodium complex, a Wilkinson catalyst, is used for the hydrogenation of alkenes.

Cisplatin is a coordination compound used as an anticancer drug. It binds to DNA, causing cells to stop dividing. The compound trans-platin, however, is not effective as an anticancer drug.

i Write the formula of Wilkinson catalyst.

ii Write the IUPAC name of cisplatin.

iii Which type if isomerism is shown by Cisplatin. Draw the isomers of Cisplatin.

OR

Why is the cis form effective while trans form is not?

SECTION E

The following questions are long answer type and carry 5 marks each. All questions have an internal choice

31 i Define the order of reaction.

ii For a first order reaction, show that time required for 99% completion is twice the time required for the completion of 90% of reaction.

iii The activation energy for the reaction
$2\ HI(g) \rightarrow H_2 + I_2\ (g)$ is 209.5 kJ mol^{-1} at 581K.Calculate the fraction of molecules of reactants having energy equal to or greater than activation energy?

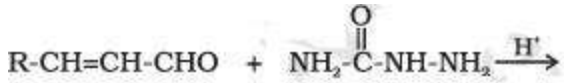
OR

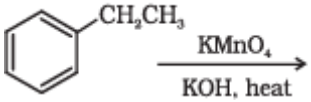
i Define collision frequency.

ii Show that in a first order reaction, time required for completion of 99.9% is 10 times of half-life ($t_{1/2}$) of the reaction.

iii The rate of a reaction quadruples when the temperature changes from 293 K to 313 K. Calculate the energy of activation of the reaction assuming that it does not change with temperature.

32 i Complete the following reactions-

(a) 

(b) 

ii An organic compound (A) with molecular formula C8H8O forms an orange-red precipitate with 2,4-DNP reagent and gives yellow precipitate on heating with iodine in the presence of sodium hydroxide. It neither reduces Tollens' or Fehlings' reagent, nor does it decolourise bromine water or Baeyer's reagent. On drastic oxidation with chromic acid, it gives a carboxylic acid (B) having molecular formula $C_7H_6O_2$. Identify the compounds (A) and (B) and explain the reactions involved.

OR

i Write product and name of reaction involved, when ethanoic acid heated with concentrated Br_2 in presence of red phosphorous.

ii Write suitable chemical test to distinguish benzaldehyde and propanal.

iii An organic compound with the molecular formula $C_9H_{10}O$ forms 2,4-DNP derivative, reduces Tollens' reagent and undergoes Cannizzaro reaction. On vigorous oxidation, it gives 1,2-benzenedicarboxylic acid. Identify the compound and write the chemical reactions involved.

33 i What happens when D-glucose is treated with the following reagents?
(a) HI (b) Bromine water (c) HNO_3 (Write the reactions also)

ii What are the hydrolysis products of (a) sucrose and (b) lactose?

OR

i What is the basic structural difference between starch and cellulose?

ii Why sucrose is reducing sugar whereas maltose is reducing although both are disaccharides.

iii What is the difference between a nucleoside and a nucleotide?

iv Enumerate the reactions of D-glucose which cannot be explained by its open chain structure (Any two)

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केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

कक्षा बारहवी द्वितीय प्री-बोर्ड परीक्षा : 2025-26

PRE-BOARD II EXAMINATION: 2025-26

SUBJECT : PHYSICS THEORY (042)

SET B

MM : 70 **TIME : 3 HOURS**

GENERAL INSTRUCTIONS:

(1) There are 33 questions in all. All questions are compulsory.
(2) This question paper has five sections: Section A, Section B, Section C, Section D and Section E.
(3) All the sections are compulsory.
(4) Section A contains sixteen questions, twelve MCQ and four Assertion Reasoning based of 1 mark each, Section B contains five questions of two marks each, Section C contains seven questions of three marks each, Section D contains two case study based questions of four marks each and Section E contains three long answer questions of five marks each.
(5) There is no overall choice. However, an internal choice has been provided in two questions in Section B, one question in Section C, one question in each CBQ in Section D and all three questions in Section E. You have to attempt only one of the choices in such questions.
(6)Use of calculators is not allowed.
(7) You may use the following values of physical constants where ever necessary
$c = 3 \times 10^8$ m/s, $m_e = 9.1 \times 10^{-31}$kg , $e = 1.6 \times 10^{-19}$ C, $\mu_0 = 4\pi \times 10^{-7}$ TmA^{-1} ,
$\varepsilon_0 = 8.85 \times 10^{-12} C^2 N^{-1} m^{-2}$,Avagadro Number $N_A = 6.02 \times 10^{23}$per gram mole

Section A

1 The curve of binding energy per nucleon as a function of atomic mass number has a sharp peak for helium nucleus. This implies that helium nucleus is 1

(A) radioactive (B) unstable
(C) easily fissionable (D) more stable nucleus than its neighbours

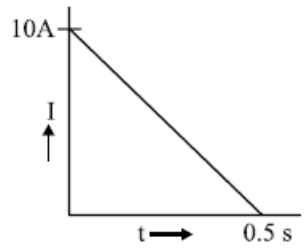
2 A bulb is rated (100 W, 110 V). It is operated by current of 1.0 A supplied by a step down transformer. If the input voltage and efficiency of the transformer are 220 V and 0.9 respectively, the input current drawn from the mains is 1

(A) $\frac{1}{2}$ A (B) $\frac{3}{8}$ A (C) $\frac{5}{9}$ A (D) $\frac{4}{7}$ A

3 Which of the following statement is true for the radio waves and the gamma rays? 1

(A) The energy of gamma rays is lesser than that of the radio waves.
(B) The frequency of the radio waves is higher than that of gamma rays.
(C) The radio waves and the gamma rays have the same energy.
(D) The energy of radio waves is lesser than that of the gamma rays.

4 In a coil of resistance 100 Ω a current is induced by changing the magnetic flux through it. The variation of current with time is as shown in the figure. The magnitude of change in flux through coil is 1



(A) 250 Wb (B) 275 Wb
(C) 225 Wb (D) 200 Wb

5 The distance of closest approach of an alpha particle is d when it moves with a speed v towards a nucleus. 1
Another alpha particle is projected with higher energy such that the new distance of the closest approach is d/2. What is the speed of projection of the alpha particle in this case?
(A) v/2 (B) $\sqrt{2}$ v (C) 2v (D) 4v

6 A point object is placed at the centre of a glass sphere of radius 6 cm and refractive index 1.5. The distance of virtual image from the surface of the sphere is 1
(A) 2 cm (B) 4 cm (C) 6 cm (D) 12 cm

7 A plane wavefront is incident on a concave mirror of radius of curvature R. The radius of the refracted wavefront will be 1
(A) 2R (B) R (C) R/2 (D) 4R

8 A point charge situated at a distance r from a short electric dipole on its axis, experience a force F .If the distance of the charge is 2r,the force on the charge will be 1
(A) F/16 (B) F/8 (C) F/4 (D) F/2

9 Two particles A and B of the same mass but having charges q and 4q respectively, are accelerated from rest through different potential differences V_A and V_B such that they attain same kinetic energies. The value of $\frac{V_A}{V_B}$ is 1
(A) ¼ (B) ½
(C) 2 (D) 4

10 A coil contains N turns of insulated copper wire of diameter d and resistivity ρ wound on a cylinder of diameter D. What is the total resistance between the two ends of the coil of copper wire?(given: D>>d) 1
(A) $\frac{4\rho ND}{d^2}$ (B) $\frac{8\rho ND}{d^2}$
(C) $\frac{2\rho ND}{d^2}$ (D) $\frac{12\rho ND}{d^2}$

11 A galvanometer having a coil resistance of 48 Ω, shows full-scale deflection for a current of 2·0 A. It can be converted into an ammeter of range (0 – 10 A) by connecting : 1
(A) in series a resistance of 8 Ω (B) in parallel a resistance of 8 Ω
(C) in parallel a resistance of 12 Ω (D) in series a resistance of 12 Ω

12 Which of the following substances has relative magnetic permeability $\mu_r >> 1$ 1
(A) Aluminium (B) Copper
(C) Nickel (D) Bismuth

For Questions 13 to 16, two statements are given –one labelled Assertion (A) and other labelled Reason (R). Select the correct answer to these questions from the options as given below.

A. If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

B. If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

C. If Assertion is true but Reason is false.

D. If both Assertion and Reason are false.

13 **Assertion(A) :** In Lyman series, the ratio of minimum and maximum wavelength is 3/4. 1

Reason(R) : Lyman series constitute spectral lines corresponding to transition from higher energy to ground state of hydrogen atom.

14 **Assertion (A) :** The phase difference between any two points on a wavefront is zero. 1

Reason (R) : All points on a wavefront are at the same distance from the source and thus oscillate in the same phase.

15 **Assertion (A) :** Electrostatic force is a conservative force. 1

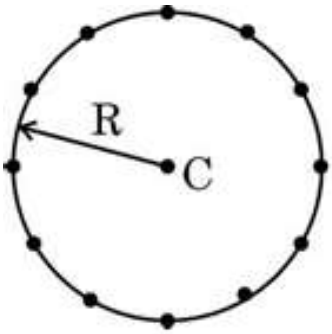
Reason (R) : In an electrostatic field, the work done between two points per unit positive charge depends on the path followed.

16 **Assertion (A) :** The image of an object placed between f and 2f from a convex lens can be seen on a screen. If the screen is removed, image is not formed. 1

Reason (R) : Rays from a given point on the object placed between f and 2f, after passing through a convex lens, do not converge on a point in space.

SECTION - B

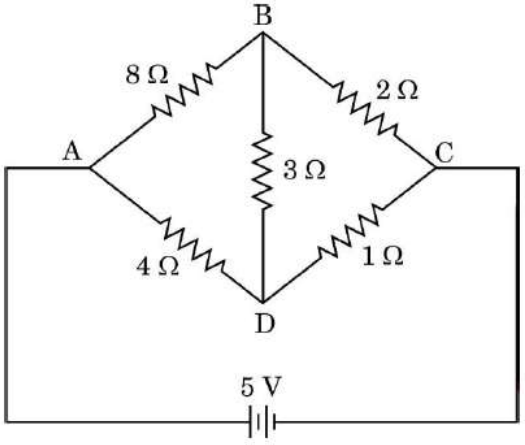
17 Twelve negative charges of same magnitude are equally spaced and fixed on the circumference of a circle of radius R as shown in Fig. Relative to potential being zero at infinity, find the electric potential and electric field at the centre C of the circle. 2



18 A cell is connected across an external resistance 12Ω and supplies 0.25A current. When the external resistance is increased by 4Ω, the current reduces to 0.2 A. Calculate (i) the emf, and (ii) the internal resistance, of the cell. 2

OR

The figure shows a network of resistors connected across a battery. Find the current supplied by the battery of emf 5 V and internal resistance $\frac{2}{3}\Omega$.



19 A small magnetised needle P is placed at the origin of x-y plane with its magnetic moment pointing along the y-axis. Another identical magnetised needle Q is placed in two positions, one by one. 2

Case 1 : at (a, 0) with its magnetic moment pointing along x-axis.

Case 2 : at (0, a) with its magnetic moment pointing along y-axis.

(a) In which case is the potential energy of P and Q minimum?

(b) In which case is P and Q not in equilibrium?

Justify your answers.

OR

A wire of length l is in the form of a circular loop A of one turn. This loop is reshaped into loop B of three turns. Find the ratio of the magnetic fields at the centres of loop A and loop B for the same current through them. 2

20 (a) How is an electromagnetic wave produced? 2

(b) Sketch a schematic diagram depicting the electric and magnetic fields for an electromagnetic wave propagating along z-axis.

OR

In a plane electromagnetic wave in free space, the electric field oscillates sinusoidally at a frequency of $1{\cdot}5 \times 10^{10}$ Hz with amplitude 36 Vm^{-1}. Find: 2

(a) the wavelength of the wave, and

(b) the amplitude of the associated magnetic field.

21 (a) Draw a graph to show the variation of the number of scattered particles detected (N) in Geiger-Marsden experiment as a function of scattering angle (θ). 2

(b) Discuss briefly two conclusions that can be drawn from this graph and how they lead to the discovery of nucleus in an atom.

SECTION C

22 A potential difference V is applied across a conductor of length l and uniform cross-section area A. How will the (i) electric field E, (ii) drift velocity v_d, and (iii) current density j be affected when (a) V is doubled and (b) l is halved (keeping other factors constant)? Explain. 3

23 A proton with kinetic energy $1{\cdot}3384 \times 10^{-14}$ J moving horizontally from north to south, enters a uniform magnetic field B of 2·0 mT directed eastward. Calculate: 3

(a) the speed of the proton

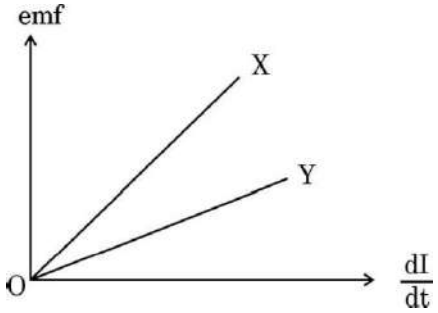
(b) the magnitude of acceleration of the proton

(c) the radius of the path traced by the proton

[Take (q /m) for proton = $1{\cdot}0 \times 10^8$ C/kg]

24 (a) State faraday's laws of electromagnetic induction. 3

(b) The figure shows the variation of induced emf as a function of rate of change of current for two identical solenoids X and Y. One is air cored and the other is iron cored. Which one of them is iron cored? Why?



25 A point light source rests on the bottom of a bucket filled with a liquid of refractive index n = 1.25 up to height of 10 cm. Calculate: 3
(a) the critical angle for liquid-air interface
(b) radius of circular light patch formed on the surface by light emerging from the source.

26 (a) In diffraction due to a single slit, the phase difference between light waves reaching a point on the screen is 5π . Explain whether a bright or a dark fringe will be formed at the point. 3
(b) What should the width of each slit be to obtain eight maxima of two double-slit patterns (slit separation d) within the central maximum of the single slit pattern?
(c) Draw the plot of intensity distribution in a diffraction pattern due to a single slit.

27 (a) Prove that the density of a nucleus is independent of its mass number. 3
(b) Draw a graph showing variation of nuclear potential energy versus distance between the two nucleons. From the graph write any two characterises properties of nuclear force.

OR

(a) Distinguish between nuclear fission and fusion giving an example of each. 3
(b) Explain the release of energy in nuclear fission and fusion on the basis of binding energy per nucleon curve.

28 (a) A germanium crystal is doped with antimony. With the help of energy-band diagram, explain how the conductivity of the doped crystal is affected. 3
(b) Briefly explain the two processes involved in the formation of a p-n junction.

SECTION D
Case Study Based Questions

29 **Read the following paragraph and answers the questions:** 4

A pure semiconductor like Ge or Si, when doped with a small amount of suitable impurity, becomes an extrinsic semiconductor. In thermal equilibrium, the electron and hole concentration in it are related to the concentration of intrinsic charge carriers. A p-type or n-type semiconductor can be converted into a p-n junction by doping it with suitable impurity. Two processes, diffusion and drift take place during formation of a p-n junction. A semiconductor diode is basically a p-n junction with metallic contacts provided at the ends for the application of an external voltage. A p-n junction diode allows currents to pass only in one direction when it is forward biased. Due to this property, a diode is widely used to rectify alternating voltages, in half-wave or full wave configuration.

(i) When Ge is doped with pentavalent impurity, the energy required to free the weakly bound electron from the dopant is about

(A) 0.001 eV (B) 0.01 eV
(C) 0.72 eV (D) 1.1 eV

(ii) At a given temperature, the number of intrinsic charge carriers in a semiconductor is 2×10^{10} cm³. It is doped with pentavalent impurity atoms. As a result, the number of holes in it becomes $8 \times 10^{3} cm^{-3}$ The number of electrons in the semiconductor is

(A) $2 \times 10^{24}\ m^{-3}$ (B) $4 \times 10^{23}\ m^{-3}$
(C) $1 \times 10^{22}\ m^{-3}$ (D) $5 \times 10^{22}\ m^{-3}$

(iii) During the formation of a p-n junction -

(A) electrons diffuse from p-region into n-region and holes diffuse from n-region into p-region.

(B) both electrons and holes diffuse from n-region into p-region.

(C) electrons diffuse from n-region into p-region and holes diffuse from p-region into n-region.

(D) both electrons and holes diffuse from p-region into n-region.

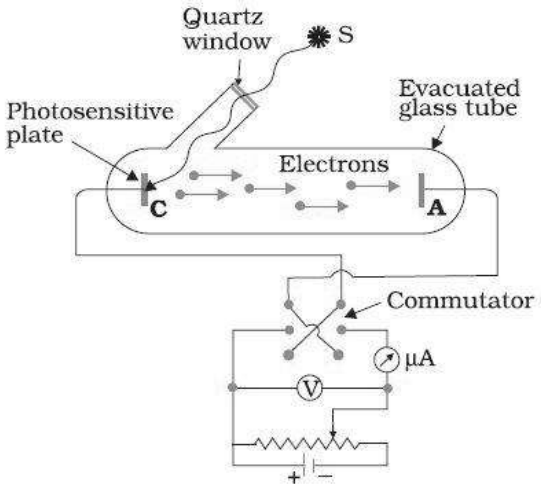
(v) An ac voltage V = 0.5 sin (100 πt) volt is applied, in turn, across a half-wave rectifier and a full-wave rectifier. The frequency of the output voltage across them respectively will be

(A) 50 Hz, 100 Hz (C) 50 Hz, 50 Hz

(B) 25 Hz, 100 Hz (D) 25 Hz, 50 Hz

30 **Read the following paragraph and answers the questions:** 4

Photoelectric emission:- The photoelectric emission experiment involves shining a monochromatic light of sufficient frequency onto a photosensitive metal plate inside an evacuated glass tube, which causes electrons to be ejected. The emitted electrons (photoelectrons) flow to a collector plate, creating a photoelectric current that can be measured by a micro-ammeter. The experiment allows for controlling the light's intensity and frequency and the potential difference between the plates to study how these factors affect the ejected electrons. A crucial condition is that the light's frequency must be above a certain "threshold frequency" for the metal, below which no emission will occur, regardless of the light's intensity.



(i) What is the value of stopping potential at threshold frequency? **(1 Mark)**

(ii) The work function of a substance is 1·6 eV. Find the longest wavelength of light that can produce photoemission from the surface of substance. **(1 Mark)**

(iii) Maximum kinetic energy of a photoelectron is E when the wavelength of incident light is λ. If energy becomes four times when wavelength is reduced to one–third, then what will be the work-function of the metal? **(2 Mark)**

SECTION E

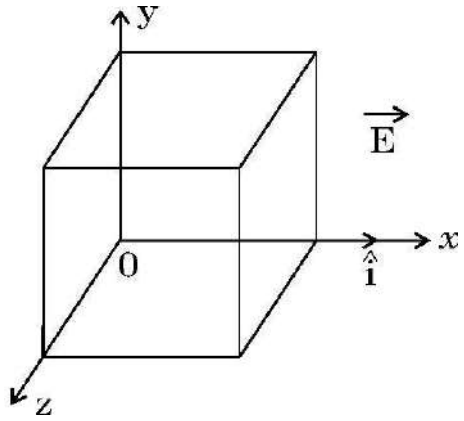
31 (a) A dielectric slab of dielectric constant 'K' and thickness 't' is inserted between plates of a parallel plate capacitor of plate separation d and plate area A. Obtain an expression for its capacitance. 5

(b) Two capacitors of different capacitances are connected first (1) in series and then (2) in parallel across a de source of 100 V. If the total energy stored in the combination in the two cases are 40 mJ and 250 mJ respectively, find the capacitance of the capacitors.

OR

(a) Using Gauss's law, show that the electric field **E** at a point due to uniformly charged infinite plane sheet is given by **E** $=\frac{\sigma}{\varepsilon_o}\hat{n}$ where symbols have their usual meanings. Draw necessary diagram. 5

(b) Electric field **E** in a region is given by **E** = $(5x^2 + 2)\,\hat{\imath}$ where **E** is in N/C and x is in meters. A cube of side 10 cm is placed in the region as shown in figure.
Calculate (i) the electric flux through the cube, and (ii) the net charge enclosed by the cube.



5

32 (a) Obtain an expression for the mutual inductance of two long coaxial solenoids, each of length l but having different number of turns N_1 and N_2 and radii r_1 and $r_2(r_2>r_1)$. Write any two factors on which the mutual inductance of two long coaxial solenoids depends.

(b) Calculate the self-inductance of a coil using the following data obtained when an AC source of frequency $\frac{200}{\pi}$ Hz and a DC source is applied across the coil.

AC SOURCE		
S.NO.	V (Volts)	I (A)
1	3.0	0.5
2	6.0	1.0
3	9.0	1.5

DC SOURCE		
S.NO.	V (Volts)	I (A)
1	4.0	1.0
2	6.0	1.5
3	8.0	2.0

OR

5

(a) Find the condition for resonance in a series LCR circuit connected to a source $v = v_0\sin\omega t$. Give the factors on which the resonant frequency of a series LCR circuit depends. Plot a graph showing the variation of electric current with frequency in a series LCR circuit.

(b) A series R-C circuit with R = 200Ω and C = $\frac{50}{\pi}$ F is connected across an AC source of V_o = 100 V and frequency ν = 50 Hz. Calculate (i) impedance of the circuit (Z) and (ii) voltage across the resistor.

33 (a) Give any two differences between the interference pattern obtained in Young's double-slit experiment and a diffraction pattern due to a single slit. 5

(b) Draw an intensity distribution graph in case of a Young's double-slit interference pattern.

(c) In Young's double-slit experiment using monochromatic light of wavelength λ, the intensity of light at a point on the screen, where path difference is A, is K units. Find the intensity of light at a point on the screen where the path difference is λ/6.

OR

(a) Draw a labelled ray diagram of a compound microscope showing image formation at least distance of distinct vision. Write an expression for its magnifying power. 5

(b) Write any four advantages of a reflecting type telescope over a refracting type telescope.

(c) A telescope consists of two lenses of focal length 100 cm and 5 cm. Find the magnifying power when the final image is formed at infinity.

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

कक्षा बारहवी द्वितीय प्री-बोर्ड परीक्षा : 2025-26

PRE-BOARD II EXAMINATION: 2025-26

SUBJECT : PHYSICS THEORY (042)

SET A

MM : 70 **TIME: 3 HOURS**

GENERAL INSTRUCTIONS:

(1) There are 33 questions in all. All questions are compulsory.
(2) This question paper has five sections: Section A, Section B, Section C, Section D and Section E.
(3) All the sections are compulsory.
(4) Section A contains sixteen questions, twelve MCQ and four Assertion Reasoning based of 1 mark each, Section B contains five questions of two marks each, Section C contains seven questions of three marks each, Section D contains two case study based questions of four marks each and Section E contains three long answer questions of five marks each.
(5) There is no overall choice. However, an internal choice has been provided in two questions in Section B, one question in Section C, one question in each CBQ in Section D and all three questions in Section E. You have to attempt only one of the choices in such questions.
(6) Use of calculators is not allowed.
(7) You may use the following values of physical constants where ever necessary
$c = 3 \times 10^8$ m/s, $m_e = 9.1 \times 10^{-31}$kg , $e = 1.6 \times 10^{-19}$ C, $\mu_0 = 4\pi \times 10^{-7}$ TmA^{-1} ,
$\varepsilon_0 = 8.85 \times 10^{-12} C^2N^{-1}m^{-2}$,Avagadro Number $N_A = 6.02 \times 10^{23}$per gram mole

Section A

1 A point charge situated at a distance r from a short electric dipole on its axis, experience a force F .If the distance of the charge is 2r,the force on the charge will be 1

(A) F/16 (B) F/8
(C) F/4 (D) F/2

2 Two particles A and B of the same mass but having charges q and 4q respectively, are accelerated from rest through different potential differences V_A and V_B such that they attain same kinetic energies. The value of $\frac{V_A}{V_B}$ is 1

(A) ¼ (B) ½
(C) 2 (D) 4

3 A coil contains N turns of insulated copper wire of diameter d and resistivity ρ wound on a cylinder of diameter D. What is the total resistance between the two ends of the coil of copper wire?(given: D>>d) 1

(A) $\frac{4\rho ND}{d^2}$ (B) $\frac{8\rho ND}{d^2}$
(C) $\frac{2\rho ND}{d^2}$ (D) $\frac{12\rho ND}{d^2}$

4 A galvanometer having a coil resistance of 48 Ω, shows full-scale deflection for a current of 2·0 A. It can be converted into an ammeter of range (0 – 10 A) by connecting : 1

(A) in series a resistance of 8 Ω (B) in parallel a resistance of 8 Ω
(C) in parallel a resistance of 12 Ω (D) in series a resistance of 12 Ω

5 Which of the following substances has relative magnetic permeability $\mu_r >> 1$ 1

(A) Aluminium (B) Copper

(C) Nickel (D) Bismuth

6 The curve of binding energy per nucleon as a function of atomic mass number has a sharp peak for helium nucleus. This implies that helium nucleus is 1

(A) radioactive (B) unstable

(C) easily fissionable (D) more stable nucleus than its neighbours

7 A bulb is rated (100 W, 110 V). It is operated by current of 1.0 A supplied by a step down transformer. If the input voltage and efficiency of the transformer are 220 V and 0.9 respectively, the input current drawn from the mains is 1

(A) $\frac{1}{2}$ A (B) $\frac{3}{8}$ A (C) $\frac{5}{9}$ A (D) $\frac{4}{7}$ A

8 Which of the following statement is true for the radio waves and the gamma rays? 1

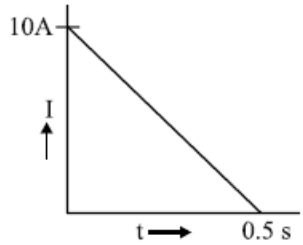
(A) The energy of gamma rays is lesser than that of the radio waves.

(B) The frequency of the radio waves is higher than that of gamma rays.

(C) The radio waves and the gamma rays have the same energy.

(D) The energy of radio waves is lesser than that of the gamma rays.

9 In a coil of resistance 100 Ω a current is induced by changing the magnetic flux through it. The variation of current with time is as shown in the figure. The magnitude of change in flux through coil is 1



(A) 250 Wb (B) 275 Wb (C) 225 Wb (D) 200 Wb

10 The distance of closest approach of an alpha particle is d when it moves with a speed v towards a nucleus. 1

Another alpha particle is projected with higher energy such that the new distance of the closest approach is d/2. What is the speed of projection of the alpha particle in this case?

(A) v/2 (B) $\sqrt{2}$ v (C) 2v (D) 4v

11 A point object is placed at the centre of a glass sphere of radius 6 cm and refractive index 1.5. The distance of virtual image from the surface of the sphere is 1

(A) 2 cm (B) 4 cm (C) 6 cm (D) 12 cm

12 A plane wavefront is incident on a concave mirror of radius of curvature R. The radius of the refracted wavefront will be 1

(A) 2R (B) R (C) R/2 (D) 4R

For Questions 13 to 16, two statements are given –one labelled Assertion (A) and other labelled

Reason (R). Select the correct answer to these questions from the options as given below.

A. If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
B. If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
C. If Assertion is true but Reason is false.
D. If both Assertion and Reason are false.

13 **Assertion (A) :** Electrostatic force is a conservative force. 1
Reason (R) : In an electrostatic field, the work done between two points per unit positive charge depends on the path followed.

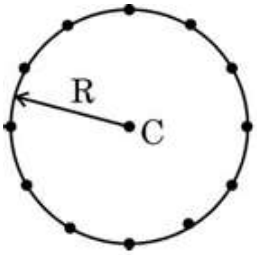
14 **Assertion (A) :** The image of an object placed between f and 2f from a convex lens can be seen on a screen. If the screen is removed, image is not formed. 1
Reason (R) : Rays from a given point on the object placed between f and 2f, after passing through a convex lens, do not converge on a point in space.

15 **Assertion (A) :** The phase difference between any two points on a wavefront is zero. 1
Reason (R) : All points on a wavefront are at the same distance from the source and thus oscillate in the same phase.

16 **Assertion(A) :** In Lyman series, the ratio of minimum and maximum wavelength is 3/4. 1
Reason(R) : Lyman series constitute spectral lines corresponding to transition from higher energy to ground state of hydrogen atom.

SECTION - B

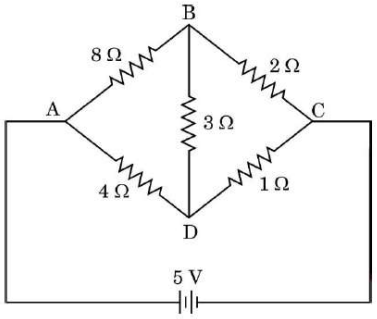
17 Twelve negative charges of same magnitude are equally spaced and fixed on the circumference of a circle of radius R as shown in Fig. Relative to potential being zero at infinity, find the electric potential and electric field at the centre C of the circle. 2



18 A cell is connected across an external resistance 12Ω and supplies 0.25A current. When the external resistance is increased by 4Ω, the current reduces to 0.2 A. Calculate (i) the emf, and (ii) the internal resistance, of the cell. 2

OR

The figure shows a network of resistors connected across a battery. Find the current supplied by the battery of emf 5 V and internal resistance $\frac{2}{3}$ Ω. 2



19 A small magnetised needle P is placed at the origin of x-y plane with its magnetic moment pointing along the y-axis. Another identical magnetised needle Q is placed in two positions, one by one. 2

Case 1 : at (a, 0) with its magnetic moment pointing along x-axis.

Case 2 : at (0, a) with its magnetic moment pointing along y-axis.

(a) In which case is the potential energy of P and Q minimum?

(b) In which case is P and Q not in equilibrium?

Justify your answers.

OR

A wire of length l is in the form of a circular loop A of one turn. This loop is reshaped into loop B of three turns. Find the ratio of the magnetic fields at the centres of loop A and loop B for the same current through them. 2

20 (a) How is an electromagnetic wave produced? 2

(b) Sketch a schematic diagram depicting the electric and magnetic fields for an electromagnetic wave propagating along z-axis.

OR

In a plane electromagnetic wave in free space, the electric field oscillates sinusoidally at a frequency of $1{\cdot}5 \times 10^{10}$ Hz with amplitude 36 Vm^{-1}. Find: 2

(a) the wavelength of the wave, and

(b) the amplitude of the associated magnetic field.

21 (a) Draw a graph to show the variation of the number of scattered particles detected (N) in Geiger-Marsden experiment as a function of scattering angle (θ). 2

(b) Discuss briefly two conclusions that can be drawn from this graph and how they lead to the discovery of nucleus in an atom.

SECTION C

22 A potential difference V is applied across a conductor of length l and uniform cross-section area A. How will the (i) electric field E, (ii) drift velocity v_d, and (iii) current density j be affected when (a) V is doubled and (b) l is halved (keeping other factors constant)? Explain. 3

23 A proton with kinetic energy $1{\cdot}3384 \times 10^{-14}$ J moving horizontally from north to south, enters a uniform magnetic field B of 2·0 mT directed eastward. Calculate: 3

(a) the speed of the proton

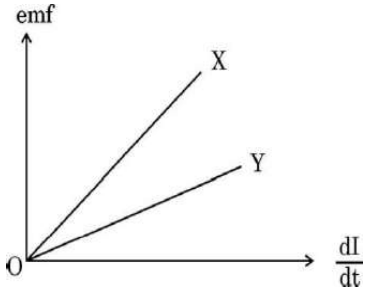
(b) the magnitude of acceleration of the proton

(c) the radius of the path traced by the proton

[Take (q /m) for proton = $1{\cdot}0 \times 10^8$ C/kg]

24 (a) State faraday's laws of electromagnetic induction. 3

(b) The figure shows the variation of induced emf as a function of rate of change of current for two identical solenoids X and Y. One is air cored and the other is iron cored. Which one of them is iron cored? Why?



25 A point light source rests on the bottom of a bucket filled with a liquid of refractive index n = 1.25 up to height of 10 cm. Calculate: 3
(a) the critical angle for liquid-air interface
(b) radius of circular light patch formed on the surface by light emerging from the source.

26 (a) In diffraction due to a single slit, the phase difference between light waves reaching a point on the screen is 5π . Explain whether a bright or a dark fringe will be formed at the point. 3
(b) What should the width of each slit be to obtain eight maxima of two double-slit patterns (slit separation d) within the central maximum of the single slit pattern?
(c) Draw the plot of intensity distribution in a diffraction pattern due to a single slit.

27 (a) Prove that the density of a nucleus is independent of its mass number. 3
(b) Draw a graph showing variation of nuclear potential energy versus distance between the two nucleons. From the graph write any two characterises properties of nuclear force.

OR

(a) Distinguish between nuclear fission and fusion giving an example of each. 3
(b) Explain the release of energy in nuclear fission and fusion on the basis of binding energy per nucleon curve.

28 (a) A germanium crystal is doped with antimony. With the help of energy-band diagram, explain how the conductivity of the doped crystal is affected. 3
(b) Briefly explain the two processes involved in the formation of a p-n junction.

SECTION D-Case Study Based Questions

29 **Read the following paragraph and answers the questions:** 4

Semiconductor: A pure semiconductor like Ge or Si, when doped with a small amount of suitable impurity, becomes an extrinsic semiconductor. In thermal equilibrium, the electron and hole concentration in it are related to the concentration of intrinsic charge carriers. A p-type or n-type semiconductor can be converted into a p-n junction by doping it with suitable impurity. Two processes, diffusion and drift take place during formation of a p-n junction. A semiconductor diode is basically a p-n junction with metallic contacts provided at the ends for the application of an external voltage. A p-n junction diode allows currents to pass only in one direction when it is forward biased. Due to this property, a diode is widely used to rectify alternating voltages, in half-wave or full wave configuration.

(i) When Ge is doped with pentavalent impurity, the energy required to free the weakly bound electron from the dopant is about

(A) 0.001 eV (B) 0.01 eV
(C) 0.72 eV (D) 1.1 eV

(ii) At a given temperature, the number of intrinsic charge carriers in a semiconductor is 2 x 10^{10} cm^3. It is doped with pentavalent impurity atoms. As a result, the number of holes in it becomes 8 x $10^3 cm^{-3}$ The number of electrons in the semiconductor is

(A) 2 x 10^{24} m^{-3} (B) 4 x 10^{23} m^{-3}
(C) 1 x 10^{22} m^{-3} (D) 5 x 10^{22} m^{-3}

(iii) During the formation of a p-n junction -

(A) electrons diffuse from p-region into n-region and holes diffuse from n-region into p-region.

(B) both electrons and holes diffuse from n-region into p-region.

(C) electrons diffuse from n-region into p-region and holes diffuse from p-region into n-region.

(D) both electrons and holes diffuse from p-region into n-region.

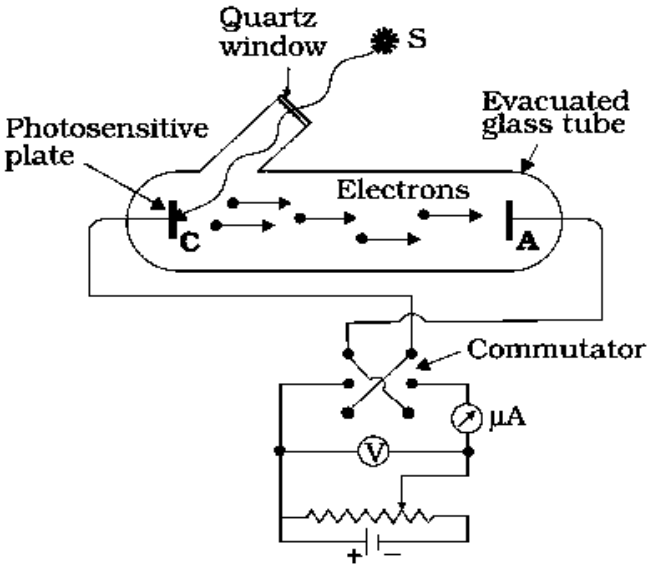
(v) An ac voltage V = 0.5 sin (100 πt) volt is applied, in turn, across a half-wave rectifier and a full-wave rectifier. The frequency of the output voltage across them respectively will be

(A) 50 Hz, 100 Hz (C) 50 Hz, 50 Hz

(B) 25 Hz, 100 Hz (D) 25 Hz, 50 Hz

30 **Read the following paragraph and answers the questions:** 4

Photoelectric Emission: - The photoelectric emission experiment involves shining a monochromatic light of sufficient frequency onto a photosensitive metal plate inside an evacuated glass tube, which causes electrons to be ejected. The emitted electrons (photoelectrons) flow to a collector plate, creating a photoelectric current that can be measured by a micro-ammeter. The experiment allows for controlling the light's intensity and frequency and the potential difference between the plates to study how these factors affect the ejected electrons. A crucial condition is that the light's frequency must be above a certain "threshold frequency" for the metal, below which no emission will occur, regardless of the light's intensity.



(i) What is the value of stopping potential at threshold frequency? **(1 Mark)**

(ii) The work function of a substance is 1·6 eV. Find the longest wavelength of light that can produce photoemission from the surface of substance. **(1 Mark)**

(iii) Maximum kinetic energy of a photoelectron is E when the wavelength of incident light is λ. If energy becomes four times when wavelength is reduced to one–third, then what will be the work-function of the metal? **(2 Mark)**

SECTION E

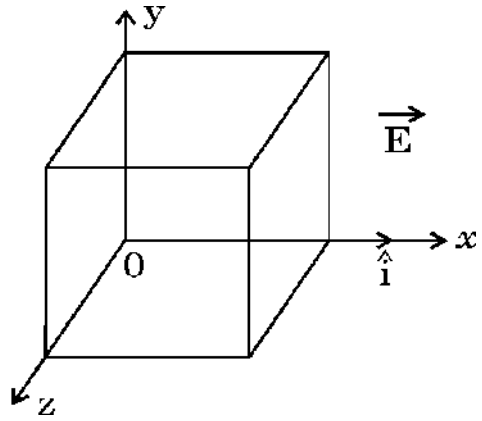
31 (a) A dielectric slab of dielectric constant 'K' and thickness 't' is inserted between plates of a parallel plate capacitor of plate separation d and plate area A. Obtain an expression for its capacitance. 5

(b) Two capacitors of different capacitances are connected first (1) in series and then (2) in parallel across a de source of 100 V. If the total energy stored in the combination in the two cases are 40 mJ and 250 mJ respectively, find the capacitance of the capacitors.

OR

(a) Using Gauss's law, show that the electric field **E** at a point due to uniformly charged infinite plane sheet is given by $\mathbf{E} = \frac{\sigma}{\varepsilon_o}\hat{n}$ where symbols have their usual meanings. Draw necessary diagram. 5

(b) Electric field **E** in a region is given by $\mathbf{E} = (5x^2 + 2)\,\hat{\imath}$ where **E** is in N/C and x is in meters. A cube of side 10 cm is placed in the region as shown in figure.
Calculate (i) the electric flux through the cube, and (ii) the net charge enclosed by the cube.



32 (a) Obtain an expression for the mutual inductance of two long coaxial solenoids, each of length l but having different number of turns N_1 and N_2 and radii r_1 and r_2($r_2 > r_1$). Write any two factors on which the mutual inductance of two long coaxial solenoids depends. 5

(b) Calculate the self-inductance of a coil using the following data obtained when an AC source of frequency $\frac{200}{\pi}$ Hz and a DC source is applied across the coil.

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S.NO.	V (Volts)	I (A)
1	4.0	1.0
2	6.0	1.5
3	8.0	2.0

OR

(a) Find the condition for resonance in a series LCR circuit connected to a source $v = v_0 \sin\omega t$. Give the factors on which the resonant frequency of a series LCR circuit depends. Plot a graph showing the variation of electric current with frequency in a series LCR circuit. 5

(b) A series R-C circuit with R = 200Ω and C = $\frac{50}{\pi}$ F is connected across an AC source of V_o = 100 V and frequency ν = 50 Hz. Calculate (i) impedance of the circuit (Z) and (ii) voltage across the resistor.

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(b) Draw an intensity distribution graph in case of a Young's double-slit interference pattern.

(c) In Young's double-slit experiment using monochromatic light of wavelength λ, the intensity of light at a point on the screen, where path difference is A, is K units. Find the intensity of light at a point on the screen where the path difference is λ/6.

OR

(a) Draw a labelled ray diagram of a compound microscope showing image formation at least distance of distinct vision. Write an expression for its magnifying power. 5

(b) Write any four advantages of a reflecting type telescope over a refracting type telescope.

(c) A telescope consists of two lenses of focal length 100 cm and 5 cm. Find the magnifying power when the final image is formed at infinity.

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग **SET-B**

Kendriya Vidyalaya Sangathan, Ahmedabad Region

द्वितीय प्री-बोर्ड परीक्षा (2025-26)

Pre-board II Examination (2025-26)

Subject: Mathematics (041) **M.M:80**

Class: XII **Time: 3 hrs.**

General Instructions:

Read the following instructions very carefully and strictly follow them:

1. This Question Paper contains 38 questions. All questions are compulsory.
2. This Question paper is divided into five Sections - A, B, C, D and E.
3. In Section A, Questions no. 1 to 18 are multiple choice questions (MCQs) with only one correct option and Questions no. 19 and 20 are Assertion-Reason based questions of 1 mark each.
4. In Section B, Questions no. 21 to 25 are Very Short Answer (VSA)-type questions, carrying 2 marks each.
5. In Section C, Questions no. 26 to 31 are Short Answer (SA)-type questions, carrying 3 marks each.
6. In Section D, Questions no. 32 to 35 are Long Answer (LA)-type questions, carrying 5 marks each.
7. In Section E, Questions no. 36 to 38 are Case study-based questions, carrying 4 marks each.
8. There is no overall choice. However, an internal choice has been provided in 2 questions in Section B, 3 questions in Section C, 2 questions in Section D and one subpart each in 2 questions of Section E.
9. Use of calculator is not allowed.

SECTION A

This section comprises multiple choice questions (MCQs) of 1 mark each.

1 The integrating factor of the differential equation $(1 - x^2)\frac{dy}{dx} + xy = ax$ is

(A) $\frac{1}{x^2-1}$ (B) $\frac{1}{\sqrt{x^2-1}}$ (C) $\frac{1}{1-x^2}$ (D) $\frac{1}{\sqrt{1-x^2}}$

2 If $\vec{a}$, $\vec{b}$ and $\vec{a} + \vec{b}$ are all unit vectors and θ is the angle between $\vec{a}$ and $\vec{b}$, then the value of θ is

(A) $\frac{2\pi}{3}$ (B) $\frac{5\pi}{6}$ (C) $\frac{\pi}{3}$ (D) $\frac{\pi}{6}$

3 The projection of vector $\hat{\imath}$ on the vectore $\hat{\imath} + \hat{\jmath} + 2\hat{k}$ is :

(A) $\frac{1}{\sqrt{6}}$ (B) $\sqrt{6}$ (C) $\frac{2}{\sqrt{6}}$ (D) $\frac{3}{\sqrt{6}}$

4 The unit vector perpendicular to both vectors $\hat{\imath} + \hat{k}$ and $\hat{\imath} - \hat{k}$ is :

(A) $2j$ (B) $\hat{\jmath}$ (C) $\frac{i-\hat{k}}{\sqrt{2}}$ (D) $\frac{i+\hat{k}}{\sqrt{2}}$

5 If a line makes angles of 90^0, 135^0 and 45^0 with the x, y and z axes respectively, then its direction cosines are

(A) $0, -\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}$ (B) $-\frac{1}{\sqrt{2}}, 0, \frac{1}{\sqrt{2}}$

(C) $\frac{1}{\sqrt{2}}, 0, -\frac{1}{\sqrt{2}}$ (D) $0, \frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}$

6 If A is a square matrix such that $A^2 = I$, then $(A-I)^3 + (A+I)^3 - 7A$ is equal to

(A) A (B) I -A (C) I + A (D) 3A

7 If for a square matrix A, $A^2 - 3A + I = O$ and $A^{-1} = x\,A + y\,I$, then the value of $x + y$ is:

(A) -2 (B) 2 (C) 3 (D) -3

8 A is a square matrix of order 3 and $|A| = 7$, then $|2\,A\,A'|$ is equal to

(A) 98 (B) 392 (C) 14 (D) None of these

9 If $A = \begin{bmatrix} cos \propto & sin \propto \\ -sin \propto & cos \propto \end{bmatrix}$, and $A^{-1} = A'$, then value of $\propto$ is

(A) π (B) $\frac{\pi}{3}$ (C) $\frac{\pi}{4}$ (D) Any real number

10 If A.(adj A) = $\begin{bmatrix} 3 & 0 & 0 \\ 0 & 3 & 0 \\ 0 & 0 & 3 \end{bmatrix}$, then the value of $|A| + |adj\ A|$ is equal to

(A) 12 (B) 9 (C) 3 (D) 27

11 If $\tan\left(\frac{x+y}{x-y}\right) = k$, then $\frac{dy}{dx}$ is equal to

(A) $\frac{-y}{x}$ (B) $\frac{y}{x}$ (C) $sec^2\left(\frac{y}{x}\right)$ (D) $-sec^2\frac{y}{x}$

12 The function f(x) =kx – sinx is strictly increasing for

(A) k>1 (B) k < 1 (C) k>–1 (D) K < -1

13 Derivative of e^{sin^2x} with respect to cos x is :

(A) $\sin x\, e^{sin^2x}$ (B) $\cos x\ e^{sin^2x}$

(C) $-2cosx\, e^{sin^2}x$ (D) $-2sin^2x \cos x\ e^{sin^2}x$

14 $\int \frac{cos2x}{sin^2x.cos^2x}\, dx$ is equal to

(A) tan x - cot x +c (B) -cot x + tan x + c

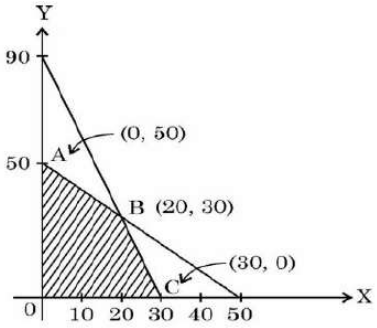
(C) cot x + tan x +c (D) -tan x -cot x + c

15 The difference of the order and the degree of the differential equation

$\left(\frac{d^2y}{dx^2}\right)^2 + \left(\frac{dy}{dx}\right)^3 + x^4 = 0$ is:

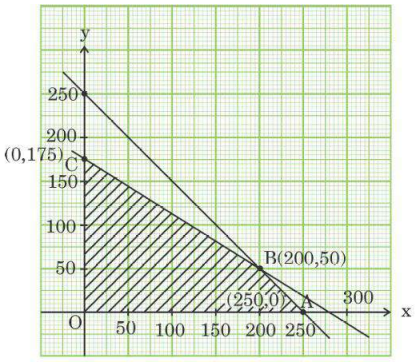
(A) 1 (B) 2 (C) -1 (D) 0

16 The maximum value of Z=4x+y for a L.P.P. whose feasible region is given below is



(A) 50 (B) 120 (C) 110 (D) 170

17 The corner points of the bounded feasible region of an LPP are O(0, 0), A(250, 0), B(200, 50) and C(0, 175). If the maximum value of the objective function Z = 2ax + by occurs at the points A(250, 0) and B(200, 50), then the relation between a and b is :



(A) a = b (B) 2a = 3b (C) 2a = b (D) a = 2b

18 If for any two events A and B, $P(A) = \frac{4}{5}$ and $P(A \cap B) = \frac{7}{10}$, then P(B/A) is equal to

(A) $\frac{1}{10}$ (B) $\frac{1}{8}$ (C) $\frac{7}{8}$ (D) $\frac{17}{20}$,

ASSERTION - REASON BASED QUESTIONS

In the following questions(19 and 20), 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 correct explanation for A

(b)Both A and R are true but R is not correct explanation for A

(c)A is true but R is false.

(d)A is false but R is true

19 **Assertion (A):** The range of the function $f(x) = 2\,sin^{-1}\,x + \frac{3\pi}{2}$, where $x \in [-1, 1]$, is $\left[\frac{\pi}{2}, \frac{5\pi}{2}\right]$.

Reason (R): The range of the principal value branch of $sin^{-1}\,x$ is $[0, \pi]$.

20 **Assertion (A):** Equation of the line passing through the points (1,2,3) and (3, -1, 3) is $\frac{x-3}{2} = \frac{y+1}{3} = \frac{z-3}{0}$.

Reason (R): Equation of a line passing through points $(x_1, y_1, z_{1)})$, $(x_2, y_2, z_{2)})$, $(x_3, y_3, z_{3)})$ is given by $\frac{x-x_1}{x_2-x_1} = \frac{y-y_1}{y_2-y_1} = \frac{z-z_1}{z_2-z_1}$.

SECTION B

This section comprises very short answer (VSA) type questions of 2 marks each.

21 Write $tan^{-1}\left[\frac{\sqrt{1+x^2}-1}{x}\right]$ in simplest form.

OR

Evaluate

$sin^{-1}\left(sin\,\frac{3\pi}{4}\right) + cos^{-1}\left(cos\,\frac{3\pi}{4}\right) + tan^{-1}(1)$

22 Find the area of a triangle having the points A(1, 1, 1), B(1, 2, 3) and C(2, 3, 1) as its vertices.

23 Find the value(s) of 'k', if the function

$$f(x) = \begin{cases} \frac{sin^2 kx}{x^2}, & if\ x \neq 0 \\ 1, & if\ x = 0 \end{cases}$$ is continuous at x =0

24 (a) If $y = cos^3 (sec^2 2t)$, find $\frac{dy}{dt}$

OR

(b) If $x^y = e^{x-y}$, prove that $\frac{dy}{dx} = \frac{logx}{(1+logx)^2}$

25 If $\vec{a}$, $\vec{b}$ and $\vec{c}$ are three vectors such that $|\vec{a}| = 7$, $|\vec{b}| = 24$ and $|\vec{c}| = 25$ and

$\vec{a} + \vec{b} + \vec{c} = \vec{0}$, then find the value of $\vec{a} \cdot \vec{b} + \vec{b} \cdot \vec{c} + \vec{c} \cdot \vec{a}$

SECTION C

This section comprises short answer (SA) type questions of 3 marks each.

26 Solve the following linear programming problem graphically:

Maximise : Z = 500x + 300y,

$$x + 2y \leq 12 \quad , 2x + y \leq 12, \quad 4x + 5y \geq 20$$

$$x \geq 0, y \geq 0$$

27 Evaluate: $\int \frac{e^x}{\sqrt{5-4e^x - e^{2x}}}\, dx$

28 Evaluate : $\int_0^{\pi} \frac{e^{cosx}}{e^{cosx} - e^{-cosx}}\, dx$

OR

Evaluate : $\int_0^{\frac{\pi}{2}} \sin 2x\ tan^{-1}(\sin x)\, dx$

29 Evaluate: $\int \frac{2x+1}{(x+1)^2\,(x-1)} dx$

30 A and B throw a die alternately till one of them gets a "6" and wins the game. Find their respective probabilities of wining, if A starts the game first.

OR

Two groups are competing for the position on the Board of directors of a corporation. The probabilities that the first and the second groups will win are 0.6 and 0.4 respectively. Further, if the first group wins, the probability of introducing

a new product is 0.7 and the corresponding probability is 0.3 if the second group wins. Find the probability that the new product introduced was by the second group.

31 Find the general solution of the differential equation:

$$(xy - x^2)\, dy = y^2\, dx$$

OR

Find the general solution of the differential equation:

$$(x^2 + 1)\frac{dy}{dx} = 2xy = \sqrt{x^2 + 4}$$

SECTION D

This section comprises long answer type questions (LA) of 5 marks each.

32 Let set A = {1, 2, 3, ..., 10} and R be a relation in A × A, defined by (a, b) R (c, d) iff a + d = b + c for all (a, b) and (c, d) ∈ A × A. Prove that R is an equivalence relation. Also find equivalence class of (5,6)

OR

Let $f : R - \left\{-\frac{4}{3}\right\} \to R$ be a function defined as $f(x) = \frac{4x}{3x+4}$. Show that f is a one-one function. Also, check whether f is an onto function or not.

33 If $\begin{bmatrix} 1 & 3 & 2 \\ 2 & 0 & -1 \\ 1 & 2 & 3 \end{bmatrix}$, then show that A satisfies the equation $A^3 - 4A^2 - 3A + 11\, I$ =O and using this result find A^{-1}.

OR

Given $A = \begin{bmatrix} -3 & -2 & -4 \\ 2 & 1 & 2 \\ 2 & 1 & 3 \end{bmatrix}$, B= $\begin{bmatrix} 1 & 2 & 0 \\ -2 & -1 & -2 \\ 0 & -1 & 1 \end{bmatrix}$, find AB and use this to solve the equations x − 2y =3, 2x − y - z =2 and -2y + z = 3

34 Using integration, find the area of the region bounded by the line $y = \sqrt{3}\, x$, the curve $y = \sqrt{4 - x^2}$ and y -axis in the first quadrant.

35 Find the equation of the line which bisects the line segment joining points A(2, 3, 4) and B(4, 5, 8) and is perpendicular to the lines

$\frac{x-8}{3} = \frac{y+19}{-16} = \frac{z-10}{7}$ and $\frac{x-15}{3} = \frac{y-29}{8} = \frac{z-5}{-5}$

SECTION E

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

36 Engine displacement is the measure of the cylinder volume swept by all the pistons of piston engine. The piston moves inside the cylinder bore.

The cylinder bore in the form of circular cylinder open at the top is to be made from a metal sheet of area $75\pi\ cm^2$.

(i) If the radius of the cylinder is r cm and height h cm, then write the volume V of cylinder in terms of r.

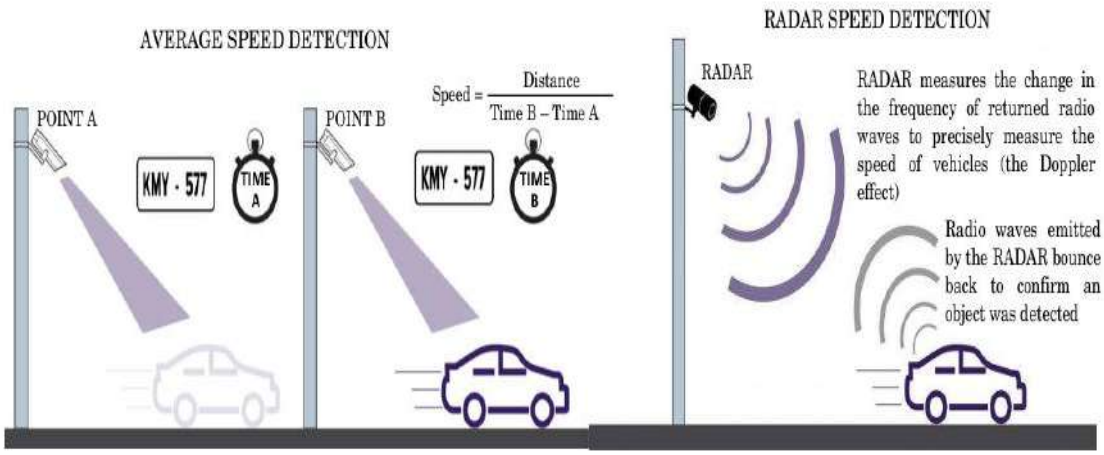
(ii) Find $\frac{dV}{dr}$

(iii) Find radius of the cylinder when its volume is maximum.

OR

(iii) Volume is maximum for h > r. State true or false and justify your answer.

37 The traffic police has installed Over Speed Violation Detection (OSVD) system at various locations in a city. These cameras can capture a speeding vehicle from 300 m and even function in the dark.



A camera is installed on a pole at the height of 5 m. It detects a car travelling away from the pole at the speed of 20 m/s. At any point, x m away from the base of the pole, the angle of elevation of the speed camera from the car C is θ.

Based on the above information, answer the following questions:

(i) Express q in terms of height of the camera installed on the pole and x.

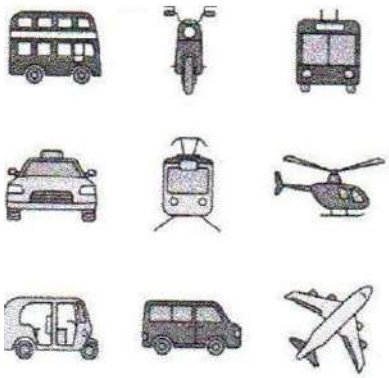
(ii) Find $\frac{d\theta}{dx}$

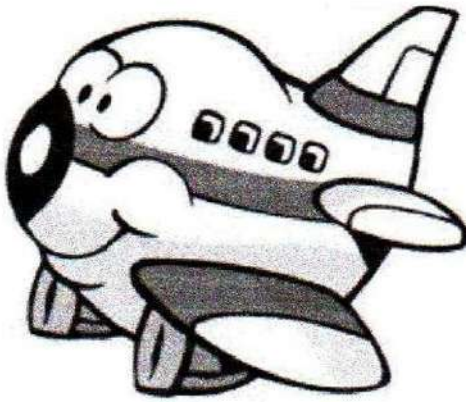
(iii) Find the rate of change of angle of elevation with respect to time at an instant when the car is 50 m away from the pole.

OR

(iii) If the rate of change of angle of elevation with respect to time of another car at 50 m from the base of the pole is $\frac{3}{101}$ rad/s, then find the speed of the car

38 Airplanes are by far the safest mode of transportation when the number of transported passengers are measured against personal injuries and fatality totals.





Previous records state that the probability of an airplane crash is 0·00001%. Further, there are 95% chances that there will be survivors after a plane crash. Assume that in case of no crash, all travelers survive. Let E_1 be the event that there is a plane crash and E_2 be the event that there is no crash. Let A be the event that passengers survive after the journey.

Based on the above information, answer the following questions:

(i) Find the probability that the airplane will not crash.

(ii) Find $P(A|E_1) + P(A|E_2)$.

(iii) Find P(A).

OR

(iii) Find $P(E_2|A)$.

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग **SET-A**

Kendriya Vidyalaya Sangathan, Ahmedabad Region

द्वितीय प्री-बोर्ड परीक्षा (2025-26)

Pre-board II Examination (2025 - 26)

Subject: Mathematics (041) **M.M:80**

Class: XII **Time: 3 hrs.**

General Instructions:

Read the following instructions very carefully and strictly follow them:

1. This Question Paper contains 38 questions. All questions are compulsory.
2. This Question paper is divided into five Sections - A, B, C, D and E.
3. In Section A, Questions no. 1 to 18 are multiple choice questions (MCQs) with only one correct option and Questions no. 19 and 20 are Assertion-Reason based questions of 1 mark each.
4. In Section B, Questions no. 21 to 25 are Very Short Answer (VSA)-type questions, carrying 2 marks each.
5. In Section C, Questions no. 26 to 31 are Short Answer (SA)-type questions, carrying 3 marks each.
6. In Section D, Questions no. 32 to 35 are Long Answer (LA)-type questions, carrying 5 marks each.
7. In Section E, Questions no. 36 to 38 are Case study-based questions, carrying 4 marks each.
8. There is no overall choice. However, an internal choice has been provided in 2 questions in Section B, 3 questions in Section C, 2 questions in Section D and one subpart each in 2 questions of Section E.
9. Use of calculator is not allowed.

SECTION A

This section comprises multiple choice questions (MCQs) of 1 mark each.

1 If A is a square matrix such that $A^2 = I$, then $(A-I)^3 + (A+I)^3 - 7A$ is equal to

(A) A (B) I -A (C) I + A (D) 3A

2 If for a square matrix A, $A^2 - 3A + I = O$ and $A^{-1} = x\,A + y\,I$, then the value of $x + y$ is:

(A) -2 (B) 2 (C) 3 (D) -3

3 A is a square matrix of order 3 and $|A| = 7$, then $|2\,A\,A'|$ is equal to

(A) 98 (B) 392 (C) 14 (D) None of these

4 If $A = \begin{bmatrix} cos \propto & sin \propto \\ -sin \propto & cos \propto \end{bmatrix}$, and $A^{-1} = A'$, then value of $\propto$ is

(A) π (B) $\frac{\pi}{3}$ (C) $\frac{\pi}{4}$ (D) Any real number

5 If A.(adj A) = $\begin{bmatrix} 3 & 0 & 0 \\ 0 & 3 & 0 \\ 0 & 0 & 3 \end{bmatrix}$, then the value of $|A| + |adj\ A|$ is equal to

(A) 12 (B) 9 (C) 3 (D) 27

6 If $\tan\left(\frac{x+y}{x-y}\right) = k$, then $\frac{dy}{dx}$ is equal to

(A) $\frac{-y}{x}$ (B) $\frac{y}{x}$ (C) $sec^2\left(\frac{y}{x}\right)$ (D) $-sec^2\frac{y}{x}$

7 The function f(x) =kx – sinx is strictly increasing for

(A) k>1 (B) k < 1 (C) k>–1 (D) K < -1

8 Derivative of e^{sin^2x} with respect to cos x is :

(A) $\sin x\ e^{sin^2x}$ (B) $\cos x\ e^{sin^2x}$

(C) $-2cosx\ e^{sin^2}x$ (D) $-2sin^2x\cos x\ e^{sin^2}x$

9 $\int \frac{cos2x}{sin^2x.cos^2x}\ dx$ is equal to

(A) tan x - cot x +c (B) -cot x + tan x + c

(C) cot x + tan x +c (D) -tan x -cot x + c

10 The difference of the order and the degree of the differential equation

$\left(\frac{d^2y}{dx^2}\right)^2 + \left(\frac{dy}{dx}\right)^3 + x^4 = 0$ is:

(A) 1 (B) 2 (C) -1 (D) 0

11 The integrating factor of the differential equation $(1 - x^2)\frac{dy}{dx} + xy = ax$ is

(A) $\frac{1}{x^2-1}$ (B) $\frac{1}{\sqrt{x^2-1}}$ (C) $\frac{1}{1-x^2}$ (D) $\frac{1}{\sqrt{1-x^2}}$

12 If $\vec{a}$, $\vec{b}$ and $\vec{a} + \vec{b}$ are all unit vectors and θ is the angle between $\vec{a}$ and $\vec{b}$, then the value of θ is

(A) $\frac{2\pi}{3}$ (B) $\frac{5\pi}{6}$ (C) $\frac{\pi}{3}$ (D) $\frac{\pi}{6}$

13 The projection of vector $\hat{\imath}$ on the vectore $\hat{\imath} + \hat{\jmath} + 2\hat{k}$ is :

(A) $\frac{1}{\sqrt{6}}$ (B) $\sqrt{6}$ (C) $\frac{2}{\sqrt{6}}$ (D) $\frac{3}{\sqrt{6}}$

14 The unit vector perpendicular to both vectors $\hat{\imath} + \hat{k}$ and $\hat{\imath} - \hat{k}$ is :

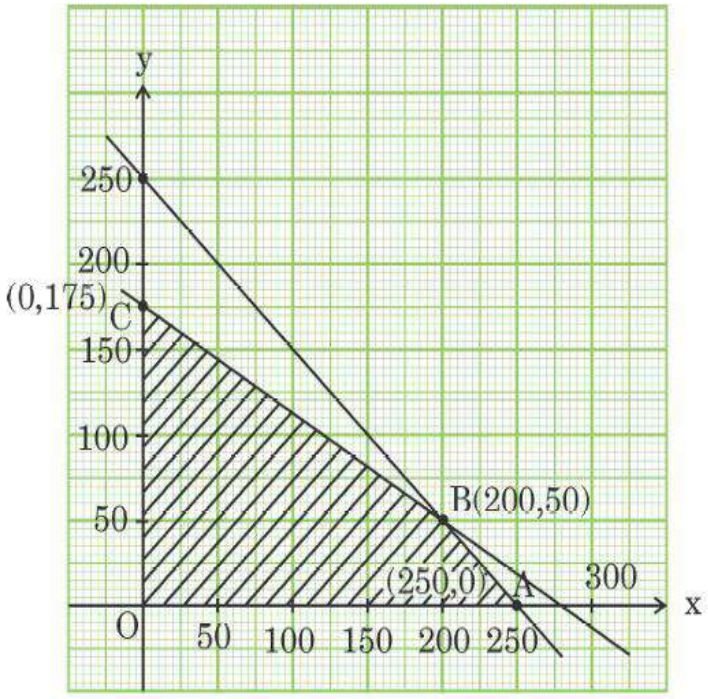
(A) $2j$ (B) $\hat{\jmath}$ (C) $\frac{i-\hat{k}}{\sqrt{2}}$ (D) $\frac{i+\hat{k}}{\sqrt{2}}$

15 If a line makes angles of 90^0, 135^0 and 45^0 with the x, y and z axes respectively, then its direction cosines are

(A) $0, -\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}$ (B) $-\frac{1}{\sqrt{2}}, 0, \frac{1}{\sqrt{2}}$

(C) $\frac{1}{\sqrt{2}}, 0, -\frac{1}{\sqrt{2}}$ (D) $0, \frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}$

16 The corner points of the bounded feasible region of an LPP are O(0, 0), A(250, 0), B(200, 50) and C(0, 175). If the maximum value of the objective function Z = 2ax + by occurs at the points A(250, 0) and B(200, 50), then the relation between a and b is :

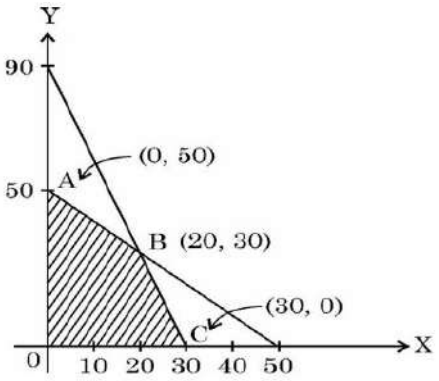


(A) a = b (B) 2a = 3b (C) 2a = b (D) a = 2b

17 If for any two events A and B, $P(A) = \frac{4}{5}$ and $P(A \cap B) = \frac{7}{10}$, then P(B/A) is equal to

(A) $\frac{1}{10}$ (B) $\frac{1}{8}$ (C) $\frac{7}{8}$ (D) $\frac{17}{20}$,

18 The maximum value of Z=4x+y for a L.P.P. whose feasible region is given below is



(A) 50 (B) 120 (C) 110 (D) 170

ASSERTION - REASON BASED QUESTIONS

In the following questions(19 and 20), 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 correct explanation for A

(b)Both A and R are true but R is not correct explanation for A

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19 **Assertion (A):** The range of the function $f(x) = 2\,sin^{-1}\,x + \frac{3\pi}{2}$, where $x \in [-1, 1]$, is $\left[\frac{\pi}{2}, \frac{5\pi}{2}\right]$.

Reason (R): The range of the principal value branch of $sin^{-1}\,x$ is $[0, \pi]$.

20 **Assertion (A):** Equation of the line passing through the points (1,2,3) and (3, -1, 3) is $\frac{x-3}{2} = \frac{y+1}{3} = \frac{z-3}{0}$.

Reason (R): Equation of a line passing through points $(x_1, y_1, z_{1)})$, $(x_2, y_2, z_{2)})$, $(x_3, y_3, z_{3)})$ is given by $\frac{x-x_1}{x_2-x_1} = \frac{y-y_1}{y_2-y_1} = \frac{z-z_1}{z_2-z_1}$.

SECTION B

This section comprises very short answer (VSA) type questions of 2 marks each.

21 Write $tan^{-1}\left[\frac{\sqrt{1+x^2}-1}{x}\right]$ in simplest form.

OR

Evaluate

$sin^{-1}\left(sin\ \frac{3\pi}{4}\right) + cos^{-1}\left(cos\ \frac{3\pi}{4}\right) + tan^{-1}(1)$

22 Find the area of a triangle having the points A(1, 1, 1), B(1, 2, 3) and C(2, 3, 1) as its vertices.

23 Find the value(s) of 'k', if the function

$$f(x) = \begin{cases} \frac{sin^2 kx}{x^2}, & if\ x \neq 0 \\ 1, & if\ x = 0 \end{cases}$$ is continuous at x =0

24 (a) If $y = cos^3(sec^2 2t)$, find $\frac{dy}{dt}$

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$\vec{a} + \vec{b} + \vec{c} = \vec{0}$, then find the value of $\vec{a} \cdot \vec{b} + \vec{b} \cdot \vec{c} + \vec{c} \cdot \vec{a}$

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This section comprises short answer (SA) type questions of 3 marks each.

26 Solve the following linear programming problem graphically:

Maximise : Z = 500x + 300y,

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$x \geq 0, y \geq 0$

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34 Using integration, find the area of the region bounded by the line $y = \sqrt{3}\,x$, the curve $y = \sqrt{4 - x^2}$ and y -axis in the first quadrant.

35 Find the equation of the line which bisects the line segment joining points A(2, 3, 4) and B(4, 5, 8) and is perpendicular to the lines

$$\frac{x-8}{3} = \frac{y+19}{-16} = \frac{z-10}{7} \text{ and } \frac{x-15}{3} = \frac{y-29}{8} = \frac{z-5}{-5}$$

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The cylinder bore in the form of circular cylinder open at the top is to be made from a metal sheet of area $75\pi\ cm^2$.

(i) If the radius of the cylinder is r cm and height h cm, then write the volume V of cylinder in terms of r.

(ii) Find $\frac{dV}{dr}$

(iii) Find radius of the cylinder when its volume is maximum.

OR

Volume is maximum for h > r. State true or false and justify your answer.

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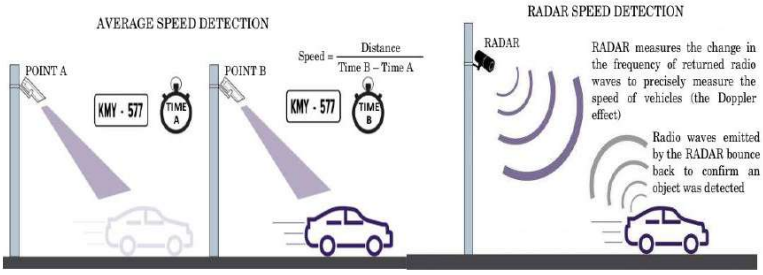

A camera is installed on a pole at the height of 5 m. It detects a car travelling away from the pole at the speed of 20 m/s. At any point, x m away from the base of the pole, the angle of elevation of the speed camera from the car C is θ.

Based on the above information, answer the following questions:

(i) Express q in terms of height of the camera installed on the pole and x.

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(iii) Find the rate of change of angle of elevation with respect to time at an instant when the car is 50 m away from the pole.

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If the rate of change of angle of elevation with respect to time of another car at 50 m from the base of the pole is $\frac{3}{101}$ rad/s, then find the speed of the car

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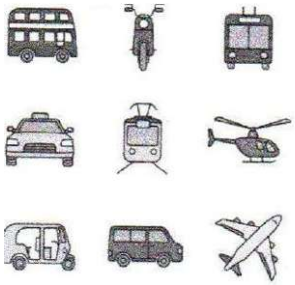


Previous records state that the probability of an airplane crash is 0·00001%. Further, there are 95% chances that there will be survivors after a plane crash. Assume that in case of no crash, all travelers survive. Let E_1 be the event that there is a plane crash and E_2 be the event that there is no crash. Let A be the event that passengers survive after the journey.

Based on the above information, answer the following questions:

(i) Find the probability that the airplane will not crash.

(ii) Find $P(A|E_1) + P(A|E_2)$.

(iii) Find P(A).

OR

Find $P(E_2|A)$.

केन्द्रीय विद्यालय संगठन, अहमदाबाद संभाग
KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION
प्री बोर्ड 2 परीक्षा: 2025-26
PRE BOARD 2 EXAMINATION: 2025-26

विषय – हिन्दी आधार (302) **अधिकतम अंक – 80 अंक**

कक्षा – XII **निर्धारित समय : 3 घंटे**

सामान्य निर्देश/GENERAL INSTRUCTIONS:

निम्नलिखित निर्देशों को बहुत सावधानी से पढ़िए और उनका अनुपालन कीजिए: -

1. यह प्रश्न-पत्र तीन खण्डों में विभाजित है।
2. खंड - क में अपठित बोध पर आधारित प्रश्न पूछे गए हैं। सभी प्रश्नों के उत्तर देना अनिवार्य है।
3. खंड 'ख' में अभिव्यक्ति और माध्यम पाठ्यपुस्तक के आधार पर प्रश्न पूछे गए हैं | प्रश्नों में आतंरिक विकल्प दिए गए हैं |
4. खंड - ग में पाठ्यपुस्तक आरोह तथा वितान से प्रश्न पूछे गए हैं। प्रश्नों में आतंरिक विकल्प दिए गए हैं |
5. तीनों खंडों के प्रश्नों के उत्तर देना अनिवार्य है।
6. यथासंभव तीनों खंडों के प्रश्नों के उत्तर क्रमशः लिखिए।

खंड 'क' (अपठित बोध) (18)

1 निम्नलिखित गद्यांश पर आधारित पूछे गए प्रश्नों के उत्तर दीजिए :- 10

बालमन तकनीक के जाल में बुरी तरह उलझ गया है। खेल, सूचनाएँ, अध्ययन से जुड़ी सामग्री, विद्यालयी गतिविधियों की जानकारियाँ और मित्रता तक सब कुछ बच्चे तकनीकी संसाधनों के माध्यम से ले रहे हैं। तकनीक के सीमित क्षेत्र में मासूम मन ने अपनी एक अलग दुनिया बना ली है। पल-पल अवतरित होती सामग्री बालमन को बहला ही नहीं, भटका भी रही है। हर तरह के रंग लिए इस सामग्री में रमे बच्चों को कोई हिदायत या अभिभावकों की सहज सलाह भी स्वीकार नहीं। इन माध्यमों ने बच्चों की मासूमियत ही नहीं समझ भी छीन ली है।

विश्व स्वास्थ्य संगठन ने मोबाइल गेमिंग की लत को एक डिसऑर्डर माना है। इस आभासी व्यस्तता के कारण एकाग्रता के साथ-साथ बच्चों की बाल सुलभ रचनात्मकता भी खो रही है।

गेमिंग की लत के कारण शारीरिक गतिविधियाँ घटने से बच्चों को मोटापा, आलस और अनिद्रा की समस्याएँ घेर रही हैं। एम्स के चिकित्सकों के अनुसार हमारे यहाँ 2050 तक लगभग 40 से 45 फीसदी बच्चे मायोपिया का शिकार हो जाएँगे। बच्चों की इस बदलती दुनिया में अभिभावकों का समय रहते चेतना आवश्यक है। बच्चों और बड़ों के बीच नियमित संवाद ज़रूरी है। घर का माहौल बदलना और माता-पिता का भी स्मार्टफोन की चकाचौंध से दूर रहना पहला क़दम है। मोबाइल फोन की लत के शिकार बच्चों को धीरे-धीरे संयम के साथ सहज जीवन की ओर मोड़ना होगा।

बीते दिनों फ्रांस में स्नायु विज्ञानी, मनोवैज्ञानिक और अन्य विशेषज्ञों की समिति ने अपनी रिपोर्ट में सिफ़ारिश की है कि बच्चों को तेरह वर्ष की आयु तक स्मार्टफोन का प्रयोग नहीं करने देना चाहिए और 18 वर्ष की आयु तक सोशल मीडिया मंचों के प्रयोग पर भी पूरी तरह रोक लगा देनी चाहिए। तकनीक के इस जाल में उलझने से बचाने या उलझने के बाद फिर सहज जीवन से जोड़ने का पहलू हो, दोनों मोर्चों पर माता-पिता का संयमित और समझ भरा बर्ताव बच्चों का जीवन सहेज सकता है। 10

(i) वर्तमान समय में बालमन किसमें उलझा हुआ है ? 1

(A) खेलकूद के जाल में (B) परीक्षाओं की तैयारी में

(C) तकनीक के जाल में (D) आभासी मित्रों के जाल में

(ii) निम्नलिखित कथन तथा कारण को ध्यानपूर्वक पढ़िए और उचित विकल्प का चयन कर लिखिए : 1

कथन : आभासी दुनिया में रमे बच्चों को बड़ों की सहज सलाह भी स्वीकार्य नहीं है।

कारण : तकनीकी संसाधनों ने बच्चों की मासूमियत के साथ-साथ उनके सोचने समझने की शक्ति को भी प्रभावित किया है।

विकल्प :

(A) कथन तथा कारण दोनों ग़लत हैं।

(B) कारण सही है. किंतु कथन ग़लत है।

(C) कथन सही है. किंतु कारण. कथन की ग़लत व्याख्या करता है।

(D) कथन तथा कारण दोनों सही हैं तथा कारण. कथन की सही व्याख्या करता है।

(iii) निम्नलिखित कथनों पर विचार कीजिए : 1

कथन I : तकनीकी सामग्री से बालमन भटक रहा है।

कथन II : तकनीकी सामग्री का बच्चों की मासूमियत पर कोई असर नहीं पड़ता ।

कथन III : तकनीकी सामग्री के कारण बच्चे कुशाग्र बुद्धि बन रहे हैं।

कथन IV : तकनीकी सामग्री के कारण बच्चों की एक अलग दुनिया बन चुकी है।

गद्यांश के अनुसार कौन-से कथन सही हैं ?

(A) केवल कथन I, II और III सही हैं।

(B) केवल कथन II और III सही हैं।

(C) केवल कथन I, II और IV सही हैं।

(D) केवल कथन I और IV सही हैं।

(iv) तकनीकी संसाधनों की महत्ता संबंधी कोई दो बिंदु लिखिए । 1

(v) मोबाइल गेमिंग का बच्चों पर क्या प्रभाव पड़ रहा है ? 2

(vi) आभासी दुनिया के दुष्प्रभावों से बच्चों को बचाने के लिए अभिभावकों को क्या-क्या कदम उठाने चाहिए ? 2

(vii) फ्रांस में विभिन्न विषय विशेषज्ञों की समिति ने आभासी दुनिया से संबंधित रिपोर्ट में कौन-कौन सी सिफारिशें की हैं? 2

2 निम्नलिखित पद्यांश पर आधारित दिए गए प्रश्नों के उत्तर दीजिए: - **(08)**

जीवन का अभियान दान-बल से अजस्र चलता है,
उतनी बढ़ी ज्योति, स्नेह जितना अनल्प जलता है।
और दान में रोकर या हँसकर हम जो देते हैं,
अहंकारवश उसे स्वत्व का त्याग मान लेते हैं।
यह न स्वत्व का त्याग, दान तो जीवन का झरना है,
रखना उसको रोक, मृत्यु से पहले ही मरना है,
किस पर करते कृपा वृक्ष यदि अपना फल देते हैं ?
गिरने से उसको सँभाल, क्यों रोक नहीं लेते हैं ?
ऋतु के बाद फलों का रुकना डालों का सड़ना है,
मोह दिखाना देय वस्तु पर आत्मघात करना है।
देते तरु इसलिए कि रेशों में मत कीट समाएँ
रहें डालियाँ स्वस्थ कि उनमें नये-नये फल आएँ
जो नर आत्मदान से अपना जीवन घट भरते हैं
वही मृत्यु के मुख में भी पड़कर न कभी मरते हैं
जहाँ कहीं है ज्योति जगत में, जहाँ कहीं उजियाला
वहाँ खड़ा है कोई अंतिम मोल चुकाने वाला।

(i) दान को जीवन का झरना क्यों कहा गया है ? 1

(A) दान कभी व्यर्थ नहीं जाता
(B) दान देने से कीर्ति बनी रहती है
(C) दान को रोकने से मृत्यु से पहले ही मृत्यु हो जाती है
(D) दान देने से जीवन की निरंतरता बनी रहती है

(ii) कविता के केंद्रीय भाव को दर्शाने वाला/वाले कथन है/हैं : 1

(I) दान से जीवन को गति मिलना
(II) परोपकार की प्रेरणा
(III) मृत्यु का वरण करना

विकल्प :

(A) केवल (I) (B) केवल (II)
(C) (I) और (II) दोनों (D) (I), (II) और (III) तीनों ही

(iii) 'अंतिम मोल चुकाने वाला' से अभिप्राय है : 1

(A) वस्तु की अंतिम कीमत अदा करने वाला
(B) स्वत्व का त्याग कर, परोपकार का दीया जलाने वाला
(C) स्वत्व की पूर्ति हेतु कोई भी कीमत अदा करने वाला
(D) कीमत के आधार पर लोगों की सहायता करने वाला

(iv) कवि ने लोगों के द्वारा दान को क्या मान लेने की बात कही है ? 1

(v) वृक्ष और फलों का उदाहरण यहाँ किस उद्देश्य से दिया गया है ? 2

(vi) आत्मदान करने वाले लोग अमर क्यों हो जाते हैं? 2

खण्ड - ख (अभिव्यक्ति और माध्यम पुस्तक पर आधारित प्रश्न)

3 निम्नलिखित दिए गए विषयों में से किसी एक विषय पर लगभग 120 शब्दों में रचनात्मक लेख लिखिए: - **1X6=6**

1. हमारे अधिकार और कर्तव्य
2. मेरे क्षेत्र का मुख्य चौराहा
3. सौर ऊर्जा : ऊर्जा का अक्षय स्रोत

4 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं चार प्रश्नों के लगभग 40 शब्दों में उत्तर दीजिए: - **4X2=8**

(i) रेडियो समाचार लेखन में किन-किन बातों का ध्यान रखा जाता है ? 2

(ii) कहानी और नाटक में मुख्य अंतर क्या है ? स्पष्ट कीजिए। 2

(iii) नए और अप्रत्याशित विषय पर लिखने से आप क्या समझते हैं ? इसका अभ्यास न होने पर क्या हानि होती है ? 2

(iv) विशेष लेखन क्या है ? विशेष लेखन और डेस्क का क्या संबंध है ? स्पष्ट कीजिए। 2

(v) 'वायस ओवर' क्या है ? नाटक में इसका क्या महत्त्व है ? 2

5 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों का लगभग 80 शब्दों में उत्तर दीजिए: - **2X4=8**

(i) पत्रकारीय लेखन किसे कहते हैं ? पत्रकारीय लेखन करने वाले पत्रकार कितने प्रकार के होते हैं ? स्पष्ट कीजिए। 4

(ii) बीट रिपोर्टिंग और विशेषीकृत रिपोर्टिंग में क्या अंतर है? उदाहरण सहित स्पष्ट कीजिए। 4

(iii) समाचार-पत्र में विचारपरक लेखन का महत्त्व बताते हुए संपादकीय लेखन पर टिप्पणी लिखिए। 4

खण्ड ग - (पाठ्यपुस्तक आरोह तथा वितान पर आधारित प्रश्न) **(40)**

6 निम्नलिखित पठित काव्यांश पर आधारित दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए: **5X1=5**

झूमने लगे फल,
रस अलौकिक
अमृत धाराएँ फूटतीं
रोपाई क्षण की,
कटाई अनंतता की
लुटते रहने से जरा भी नहीं कम होती ।
रस का अक्षय पात्र सदा का
छोटा मेरा खेत चौकोना ।

(i) निम्नलिखित कथनों पर विचार करते हुए पद्यांश के अनुसार सही कथन को चयनित कर लिखिए : 1

(A) कविता का आनंद शाश्वत है । (B) कविता का आनंद क्षणिक है ।

(C) कविता का आनंद सीमित है । (D) कविता का आनंद अल्पकाल तक है ।

(ii) कवि-कर्म की दृष्टि से 'झूमने लगे फल' का आशय है : 1

(A) साहित्य का आनंद आना

(B) कृति का पूर्ण रूप ग्रहण करना

(C) खेतों में फसल लहलहाना

(D) हृदय का प्रसन्नता से झूमना

(iii) 'रस का अक्षय पात्र' किसे कहा गया है ? 1

(A) कवि हृदय को (B) कविता पढ़ने से मिले आनंद को

(C) साहित्य को (D) चौकोने छोटे खेत को

(iv) निम्नलिखित कथन और कारण को ध्यानपूर्वक पढ़िए और सही विकल्प चुनकर लिखिए : 1

कथन : काव्यानंद जितना ही बँटता है उतना ही बढ़ता जाता है ।

कारण : साहित्य-सृजन प्राणिमात्र के मंगल के लिए है, काव्यानंद का वितरण लोक के आनंद का संवर्धन है ।

विकल्प :

(A) कथन सही है, कारण ग़लत है ।

(B) कथन सही नहीं है, कारण सही है ।

(C) कथन तथा कारण दोनों सही हैं, किंतु कारण, कथन की सही व्याख्या नहीं करता है ।

(D) कथन तथा कारण दोनों सही हैं, किंतु कारण, कथन की सही व्याख्या करता है।

(v) काव्यांश में 'अलौकिक' से तात्पर्य है : 1

(A) लौकिक (B) अद्भुत

(C) अल्पज्ञ (D) आस्था

7 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग **60** शब्दों में उत्तर दीजिए - **2X3=6**

(i) ''लक्ष्मण-मूर्च्छा और राम का विलाप' प्रसंग ईश्वरीय राम का पूरी तरह से मानवीकरण है।' सिद्ध कीजिए 3

(ii) 'बात सीधी थी पर' शीर्षक कविता से ली गई पंक्ति 'भाषा के चक्कर में ज़रा टेढ़ी फँस गई' का आशय स्पष्ट कीजिए । 3

(iii) "उषा' कविता में प्रातःकालीन आकाश में होने वाले सूर्योदय का गतिशील चित्रण हुआ है।' पुष्टि कीजिए । 3

8 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग **40** शब्दों में उत्तर दीजिए - **2X2=4**

(i) 'क्रांति की गर्जना का शोषक वर्ग पर क्या प्रभाव पड़ता है ? वह अपना मुँह क्यों ढाँप लेते हैं ?' - 'बादल राग' कविता के संदर्भ में लिखिए । 2

(ii) 'पतंग' कविता में 'बच्चों का सूरज के सामने आने' से क्या अभिप्राय है ? 2

(iii) 'दुनिया से मेरा संबंध प्रीतिकलह का है', 'आत्मपरिचय' कविता के आधार पर कथन का आशय स्पष्ट कीजिए । 2

9 निम्नलिखित पठित गद्यांश पर आधारित दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्पों को चुनकर लिखिए: **5X1=5**

शिरीष के साथ आरग्वध की तुलना नहीं की जा सकती। वह पंद्रह-बीस दिन के लिए फूलता है, वसंत ऋतु के पलाश की भाँति । कबीरदास को इस तरह पंद्रह दिन के लिए लहक उठना पसंद नहीं था। यह भी क्या कि दस दिन फूले और फिर खंखड़ के खंखड़ 'दिन दस फूला फूलिके खंखड़ भया पलास !' ऐसे दुमदारों से तो लँडूरे भले । फूल है शिरीष । वसंत के आगमन के साथ लहक उठता है, आषाढ़ तक जो निश्चित रूप से मस्त बना रहता है। मन रम गया तो भरे भादों में भी निर्घात फूलता रहता है। जब उमस से प्राण उबलता रहता है और लू से हृदय सूखता रहता है, एकमात्र शिरीष कालजयी अवधूत की भाँति जीवन की अजेयता का मंत्र प्रचार करता रहता है। यद्यपि कवियों की भाँति हर फूल-पत्ते को देखकर मुग्ध होने लायक हृदय विधाता ने नहीं दिया है, पर नितांत ठूंठ भी नहीं हूँ। शिरीष के पुष्प मेरे मानस में थोड़ा हिल्लाल जरूर पैदा करते हैं।

(i) गद्यांश में 'ठूंठ' शब्द का अर्थ है : 1

(A) पत्रहीन (B) रसहीन

(C) भावहीन (D) पुष्पहीन 'ऐसे दुमदारों से तो लँडूरे भले' लोकोक्ति का प्रयोग

(ii) 'ऐसे दुमदारों से तो लँडूरे भले' लोकोक्ति का प्रयोग गद्यांश में किस संदर्भ में किया गया है ? 1

(A) शिरीष की तुलना में आरग्वध-पलाश को हीन बताने के लिए

(B) आरग्वध-पलाश की तुलना में शिरीष को हीन बताने के लिए

(C) छोटी पूँछ वालों को लंबी पूँछ वालों से हीन बताने के लिए

(D) बिना पूँछ वालों को पूँछ वालों से श्रेष्ठ बताने के लिए

(iii) कबीरदास को पलाश के फूल क्यों पसंद नहीं थे ? 1

(A) संघर्ष शक्ति कम होने के कारण (B) जीवन शक्ति कम होने के कारण

(C) महक न होने के कारण (D) केवल वसंत में खिलने के कारण

(iv) 'शिरीष का पुष्प लेखक के मानस में हिल्लोल क्यों पैदा करता है?' इस प्रश्न के उत्तर के लिए सही विकल्प का चयन कर लिखिए : 1

I. लेखक कवियों की भाँति भावुक और कोमल था ।

II. शिरीष के बाह्य रूप पर आकर्षित हो गया था।

III. शिरीष की कठिन जिजीविषा से प्रभावित हो गया था।

IV. गर्मी और उमस से भरे वातावरण में भी शिरीष फूलों से लदा था।

विकल्प :

(A) केवल IV

(B) I और II दोनों

(C) II और III दोनों

(D) III और IV दोनों

(v) निम्नलिखित कथन तथा कारण को ध्यानपूर्वक पढ़कर उचित विकल्प का चयन कर लिखिए : 1

कथन : शिरीष कालजयी अवधूत की भाँति जीवन की अजेयता का मंत्र प्रचार करता है।

कारण : विपरीत परिस्थितियों में भी, संघर्षों से लड़ अविचल बने रहने की जिजीविषा है।

विकल्प :

(A) कथन तथा कारण दोनों गलत हैं।

(B) कारण सही है, लेकिन कथन ग़लत है।

(C) कथन सही है, लेकिन कारण, कथन की सही व्याख्या नहीं करता है।

(D) कथन तथा कारण दोनों सही हैं तथा कारण, कथन की सही व्याख्या करता है।

10 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग **60** शब्दों में उत्तर दीजिए - **2X3= 6**

(i) 'काले मेघा पानी दे' पाठ के आधार पर लिखिए कि इन्दरसेना को लेखक 'मेढक-मंडली' क्यों कहता था? जीजी के बार-बार कहने पर भी वह इन्दरसेना पर पानी फेंकने को राजी क्यों नहीं होता ? 3

(ii) शिरीष के माध्यम से लेखक ने कालजयी अवधूत की भाँति विपरीत परिस्थितियों में भी अविचल खड़े रहने की प्रेरणा दी है। स्पष्ट कीजिए। 3

(iii) 'पहलवान की ढोलक' पाठ के आधार पर सिद्ध कीजिए कि गाँव में फैली महामारी के समय प्रकृति भी मनुष्य के दुख में दुखी थी। 3

11 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग **40** शब्दों में उत्तर दीजिए - **2X2= 4**

(i) 'मेरी कल्पना का आदर्श समाज' शीर्षक के आधार पर लिखिए कि आंबेडकर के अनुसार आदर्श समाज की स्थापना के लिए क्या किया जाना चाहिए? 2

(ii) केवल बाज़ार का पोषण करने वाले अर्थशास्त्र को लेखक ने अनीतिशास्त्र क्यों कहा है ? बाज़ार दर्शन पाठ के आधार पर लिखिए। 2

(iii) भक्तिन का कौन-सा गुण विस्मित कर देने वाला था और क्यों ? 2

12 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के लगभग 100 शब्दों में उत्तर दीजिए: - **2X5 = 10**

(i) सिल्वर वैडिंग' कहानी का प्रमुख पात्र वर्तमान में रहता है, किंतु अतीत को आदर्श मानता है। इससे उसके जीवन पर क्या प्रभाव पड़ा ? स्पष्ट कीजिए । 5

(ii) जूझ' कहानी के संदर्भ में पारंपरिक पैतृक व्यवसायों के प्रति युवा पीढ़ी की विरक्ति के कारणों की समीक्षा कीजिए। 5

(iii) मुअनजो-दड़ो की सभ्यता को आडंबर विहीन सभ्यता क्यों कहा जाता है ? 'अतीत में दबे पाँव' पाठ के आधार पर स्पष्ट कीजिए। 5

केन्द्रीय विद्यालय संगठन, अहमदाबाद संभाग
KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION
प्री बोर्ड 2 परीक्षा: 2025-26
PRE BOARD 2 EXAMINATION: 2025-26

विषय – हिन्दी आधार (302) **अधिकतम अंक – 80 अंक**

कक्षा – XII **निर्धारित समय : 3 घंटे**

सामान्य निर्देश/GENERAL INSTRUCTIONS:

निम्नलिखित निर्देशों को बहुत सावधानी से पढ़िए और उनका अनुपालन कीजिए: -

1. यह प्रश्न-पत्र तीन खण्डों में विभाजित है।
2. खंड - क में अपठित बोध पर आधारित प्रश्न पूछे गए हैं। सभी प्रश्नों के उत्तर देना अनिवार्य है।
3. खंड 'ख' में अभिव्यक्ति और माध्यम पाठ्यपुस्तक के आधार पर प्रश्न पूछे गए हैं | प्रश्नों में आतंरिक विकल्प दिए गए हैं |
4. खंड - ग में पाठ्यपुस्तक आरोह तथा वितान से प्रश्न पूछे गए हैं। प्रश्नों में आतंरिक विकल्प दिए गए हैं |
5. तीनों खंडों के प्रश्नों के उत्तर देना अनिवार्य है।
6. यथासंभव तीनों खंडों के प्रश्नों के उत्तर क्रमशः लिखिए।

खंड 'क' (अपठित बोध)

अपठित बोध (18)

1 निम्नलिखित गद्यांश पर आधारित पूछे गए प्रश्नों के उत्तर दीजिए :- 10

बालमन तकनीक के जाल में बुरी तरह उलझ गया है। खेल, सूचनाएँ, अध्ययन से जुड़ी सामग्री, विद्यालयी गतिविधियों की जानकारियाँ और मित्रता तक सब कुछ बच्चे तकनीकी संसाधनों के माध्यम से ले रहे हैं। तकनीक के सीमित क्षेत्र में मासूम मन ने अपनी एक अलग दुनिया बना ली है। पल-पल अवतरित होती सामग्री बालमन को बहला ही नहीं, भटका भी रही है। हर तरह के रंग लिए इस सामग्री में रमे बच्चों को कोई हिदायत या अभिभावकों की सहज सलाह भी स्वीकार नहीं। इन माध्यमों ने बच्चों की मासूमियत ही नहीं समझ भी छीन ली है।

विश्व स्वास्थ्य संगठन ने मोबाइल गेमिंग की लत को एक डिसऑर्डर माना है। इस आभासी व्यस्तता के कारण एकाग्रता के साथ-साथ बच्चों की बाल सुलभ रचनात्मकता भी खो रही है। गेमिंग की लत के कारण शारीरिक गतिविधियाँ घटने से बच्चों को मोटापा, आलस और अनिद्रा की समस्याएँ घेर रही हैं। एम्स के चिकित्सकों के अनुसार हमारे यहाँ 2050 तक लगभग 40 से 45 फीसदी बच्चे मायोपिया का शिकार हो जाएँगे।

बच्चों की इस बदलती दुनिया में अभिभावकों का समय रहते चेतना आवश्यक है। बच्चों और बड़ों

के बीच नियमित संवाद ज़रूरी है। घर का माहौल बदलना और माता-पिता का भी स्मार्टफोन की चकाचौंध से दूर रहना पहला क़दम है। मोबाइल फोन की लत के शिकार बच्चों को धीरे-धीरे संयम के साथ सहज जीवन की ओर मोड़ना होगा। बीते दिनों फ्रांस में स्नायु विज्ञानी, मनोवैज्ञानिक और अन्य विशेषज्ञों की समिति ने अपनी रिपोर्ट में सिफ़ारिश की है कि बच्चों को तेरह वर्ष की आयु तक स्मार्टफोन का प्रयोग नहीं करने देना चाहिए और 18 वर्ष की आयु तक सोशल मीडिया मंचों के प्रयोग पर भी पूरी तरह रोक लगा देनी चाहिए। तकनीक के इस जाल में उलझने से बचाने या उलझने के बाद फिर सहज जीवन से जोड़ने का पहलू हो, दोनों मोर्चों पर माता-पिता का संयमित और समझ भरा बर्ताव बच्चों का जीवन सहेज सकता है।

(i) निम्नलिखित कथन तथा कारण को ध्यानपूर्वक पढ़िए और उचित विकल्प का चयन कर लिखिए : 1

कथन : आभासी दुनिया में रमे बच्चों को बड़ों की सहज सलाह भी स्वीकार्य नहीं है।

कारण : तकनीकी संसाधनों ने बच्चों की मासूमियत के साथ-साथ उनके सोचने समझने की शक्ति को भी प्रभावित किया है।

विकल्प :

(A) कथन तथा कारण दोनों ग़लत हैं।

(B) कारण सही है. किंतु कथन ग़लत है।

(C) कथन सही है. किंतु कारण. कथन की ग़लत व्याख्या करता है।

(D) कथन तथा कारण दोनों सही हैं तथा कारण. कथन की सही व्याख्या करता है।

(ii) वर्तमान समय में बालमन किसमें उलझा हुआ है ? 1

(A) खेलकूद के जाल में

(B) परीक्षाओं की तैयारी में

(C) तकनीक के जाल में

(D) आभासी मित्रों के जाल में

(iii) निम्नलिखित कथनों पर विचार कीजिए : 1

कथन I : तकनीकी सामग्री से बालमन भटक रहा है।

कथन II : तकनीकी सामग्री का बच्चों की मासूमियत पर कोई असर नहीं पड़ता ।

कथन III : तकनीकी सामग्री के कारण बच्चे कुशाग्र बुद्धि बन रहे हैं।

कथन IV : तकनीकी सामग्री के कारण बच्चों की एक अलग दुनिया बन चुकी है।

गद्यांश के अनुसार कौन-से कथन सही हैं ?

(A) केवल कथन I, II और III सही हैं।

(B) केवल कथन II और III सही हैं।

(C) केवल कथन I, II और IV सही हैं।

(D) केवल कथन I और IV सही हैं।

(iv) तकनीकी संसाधनों की महत्ता संबंधी कोई दो बिंदु लिखिए । 1

(v) मोबाइल गेमिंग का बच्चों पर क्या प्रभाव पड़ रहा है ? 2

(vi) आभासी दुनिया के दुष्प्रभावों से बच्चों को बचाने के लिए अभिभावकों को क्या-क्या कदम उठाने चाहिए ? 2

(vii) फ्रांस में विभिन्न विषय विशेषज्ञों की समिति ने आभासी दुनिया से संबंधित रिपोर्ट में कौन-कौन सी सिफारिशें की हैं? 2

2 निम्नलिखित पद्यांश पर आधारित दिए गए प्रश्नों के उत्तर दीजिए: - **(08)**

जीवन का अभियान दान-बल से अजस्र चलता है,
उतनी बढ़ी ज्योति, स्नेह जितना अनल्प जलता है।
और दान में रोकर या हँसकर हम जो देते हैं,
अहंकारवश उसे स्वत्व का त्याग मान लेते हैं।
यह न स्वत्व का त्याग, दान तो जीवन का झरना है,
रखना उसको रोक, मृत्यु से पहले ही मरना है,
किस पर करते कृपा वृक्ष यदि अपना फल देते हैं ?
गिरने से उसको सँभाल, क्यों रोक नहीं लेते हैं ?
ऋतु के बाद फलों का रुकना डालों का सड़ना है,
मोह दिखाना देय वस्तु पर आत्मघात करना है।
देते तरु इसलिए कि रेशों में मत कीट समाएँ
रहें डालियाँ स्वस्थ कि उनमें नये-नये फल आएँ
जो नर आत्मदान से अपना जीवन घट भरते हैं
वही मृत्यु के मुख में भी पड़कर न कभी मरते हैं
जहाँ कहीं है ज्योति जगत में, जहाँ कहीं उजियाला
वहाँ खड़ा है कोई अंतिम मोल चुकाने वाला।

(i) 'अंतिम मोल चुकाने वाला' से अभिप्राय है : 1

(A) वस्तु की अंतिम कीमत अदा करने वाला
(B) स्वत्व का त्याग कर, परोपकार का दीया जलाने वाला
(C) स्वत्व की पूर्ति हेतु कोई भी कीमत अदा करने वाला
(D) कीमत के आधार पर लोगों की सहायता करने वाला

(ii) दान को जीवन का झरना क्यों कहा गया है ? 1

(A) दान कभी व्यर्थ नहीं जाता
(B) दान देने से कीर्ति बनी रहती है
(C) दान को रोकने से मृत्यु से पहले ही मृत्यु हो जाती है
(D) दान देने से जीवन की निरंतरता बनी रहती है

(iii) कविता के केंद्रीय भाव को दर्शाने वाला/वाले कथन है/हैं : 1

(I) दान से जीवन को गति मिलना

(II) परोपकार की प्रेरणा

(III) मृत्यु का वरण करना

विकल्प :

(A) केवल (I)

(B) केवल (II)

(C) (I) और (II) दोनों

(D) (I), (II) और (III) तीनों ही

(iv) कवि ने लोगों के द्वारा दान को क्या मान लेने की बात कही है ? 1

(v) वृक्ष और फलों का उदाहरण यहाँ किस उद्देश्य से दिया गया है ? 2

(vi) आत्मदान करने वाले लोग अमर क्यों हो जाते हैं? 2

खण्ड - ख (अभिव्यक्ति और माध्यम पुस्तक पर आधारित प्रश्न) (22)

3 निम्नलिखित दिए गए विषयों में से किसी एक विषय पर लगभग 120 शब्दों में रचनात्मक लेख लिखिए: - **1X6=6**

1. हमारे अधिकार और कर्तव्य
2. मेरे क्षेत्र का मुख्य चौराहा
3. सौर ऊर्जा : ऊर्जा का अक्षय स्रोत

4 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं चार प्रश्नों के लगभग 40 शब्दों में उत्तर दीजिए: - **4X2=8**

(i) रेडियो समाचार लेखन में किन-किन बातों का ध्यान रखा जाता है ? 2

(ii) कहानी और नाटक में मुख्य अंतर क्या है ? स्पष्ट कीजिए। 2

(iii) नए और अप्रत्याशित विषय पर लिखने से आप क्या समझते हैं ? इसका अभ्यास न होने पर क्या हानि होती है ? 2

(iv) विशेष लेखन क्या है ? विशेष लेखन और डेस्क का क्या संबंध है ? स्पष्ट कीजिए। 2

(v) 'वायस ओवर' क्या है ? नाटक में इसका क्या महत्त्व है ? 2

5 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों का लगभग 80 शब्दों में उत्तर दीजिए: - **2X4=8**

(i) पत्रकारीय लेखन किसे कहते हैं ? पत्रकारीय लेखन करने वाले पत्रकार कितने प्रकार के होते हैं ? स्पष्ट कीजिए। 4

(ii) बीट रिपोर्टिंग और विशेषीकृत रिपोर्टिंग में क्या अंतर है? उदाहरण सहित स्पष्ट कीजिए। 4

(iii) समाचार-पत्र में विचारपरक लेखन का महत्त्व बताते हुए संपादकीय लेखन पर टिप्पणी लिखिए। 4

खण्ड ग - (पाठ्यपुस्तक आरोह तथा वितान पर आधारित प्रश्न) अंक (40)

6 निम्नलिखित पठित काव्यांश पर आधारित दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए: **5X1=5**

झूमने लगे फल,

रस अलौकिक

अमृत धाराएँ फूटतीं

रोपाई क्षण की,

कटाई अनंतता की

लुटते रहने से जरा भी नहीं कम होती ।

रस का अक्षय पात्र सदा का

छोटा मेरा खेत चौकोना ।

(i) कवि-कर्म की दृष्टि से 'झूमने लगे फल' का आशय है : 1

(A) साहित्य का आनंद आना

(B) कृति का पूर्ण रूप ग्रहण करना

(C) खेतों में फसल लहलहाना

(D) हृदय का प्रसन्नता से झूमना

(ii) निम्नलिखित कथनों पर विचार करते हुए पद्यांश के अनुसार सही कथन को चयनित कर लिखिए : 1

(A) कविता का आनंद शाश्वत है ।

(B) कविता का आनंद क्षणिक है ।

(C) कविता का आनंद सीमित है ।

(D) कविता का आनंद अल्पकाल तक है ।

(iii) काव्यांश में 'अलौकिक' से तात्पर्य है : 1

(A) लौकिक

(B) अद्भुत

(C) अल्पज्ञ

(D) आस्था

(iv) निम्नलिखित कथन और कारण को ध्यानपूर्वक पढ़िए और सही विकल्प चुनकर लिखिए : 1

कथन : काव्यानंद जितना ही बँटता है उतना ही बढ़ता जाता है ।

कारण : साहित्य-सृजन प्राणिमात्र के मंगल के लिए है, काव्यानंद का वितरण लोक के आनंद का संवर्धन है ।

विकल्प :

(A) कथन सही है, कारण ग़लत है ।

(B) कथन सही नहीं है, कारण सही है ।

(C) कथन तथा कारण दोनों सही हैं, किंतु कारण, कथन की सही व्याख्या नहीं करता है ।

(D) कथन तथा कारण दोनों सही हैं, किंतु कारण, कथन की सही व्याख्या करता है।

(v) 'रस का अक्षय पात्र' किसे कहा गया है ? 1

(A) कवि हृदय को (B) कविता पढ़ने से मिले आनंद को

(C) साहित्य को (D) चौकोने छोटे खेत को

7 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग **60** शब्दों में उत्तर दीजिए - **2X3=6**

(i) ' 'लक्ष्मण-मूर्च्छा और राम का विलाप' प्रसंग ईश्वरीय राम का पूरी तरह से मानवीकरण है।' सिद्ध कीजिए 3

(ii) 'बात सीधी थी पर' शीर्षक कविता से ली गई पंक्ति 'भाषा के चक्कर में ज़रा टेढ़ी फँस गई' का आशय स्पष्ट कीजिए । 3

(iii) "उषा' कविता में प्रातःकालीन आकाश में होने वाले सूर्योदय का गतिशील चित्रण हुआ है।' पुष्टि कीजिए । 3

8 निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग **40** शब्दों में उत्तर दीजिए - **2X2=4**

(i) 'क्रांति की गर्जना का शोषक वर्ग पर क्या प्रभाव पड़ता है ? वह अपना मुँह क्यों ढाँप लेते हैं ?' - 'बादल राग' कविता के संदर्भ में लिखिए । 2

(ii) 'पतंग' कविता में 'बच्चों का सूरज के सामने आने' से क्या अभिप्राय है ? 2

(iii) 'दुनिया से मेरा संबंध प्रीतिकलह का है', 'आत्मपरिचय' कविता के आधार पर कथन का आशय स्पष्ट कीजिए । 2

9 निम्नलिखित पठित गद्यांश पर आधारित दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्पों को चुनकर लिखिए: **5X1=5**

शिरीष के साथ आरग्वध की तुलना नहीं की जा सकती। वह पंद्रह-बीस दिन के लिए फूलता है, वसंत ऋतु के पलाश की भाँति । कबीरदास को इस तरह पंद्रह दिन के लिए लहक उठना पसंद नहीं था।

यह भी क्या कि दस दिन फूले और फिर खंखड़ के खंखड़ 'दिन दस फूला फूलिके खंखड़ भया पलास !' ऐसे दुमदारों से तो लँडूरे भले । फूल है शिरीष । वसंत के आगमन के साथ लहक उठता है, आषाढ़ तक जो निश्चित रूप से मस्त बना रहता है। मन रम गया तो भरे भादों में भी निर्घात फूलता रहता है। जब उमस से प्राण उबलता रहता है और लू से हृदय सूखता रहता है, एकमात्र शिरीष कालजयी अवधूत की भाँति जीवन की अजेयता का मंत्र प्रचार करता रहता है। यद्यपि कवियों की भाँति हर फूल-पत्ते को देखकर मुग्ध होने लायक हृदय विधाता ने नहीं दिया है, पर नितांत ठूंठ भी नहीं हूँ।

शिरीष के पुष्प मेरे मानस में थोड़ा हिल्लाल जरूर पैदा करते हैं।

(i) 'ऐसे दुमदारों से तो लँडूरे भले' लोकोक्ति का प्रयोग गद्यांश में किस संदर्भ में किया गया है ? 1

(A) शिरीष की तुलना में आरग्वध-पलाश को हीन बताने के लिए

(B) आरग्वध-पलाश की तुलना में शिरीष को हीन बताने के लिए

(C) छोटी पूँछ वालों को लंबी पूँछ वालों से हीन बताने के लिए

(D) बिना पूँछ वालों को पूँछ वालों से श्रेष्ठ बताने के लिए

(ii) गद्यांश में 'ठूंठ' शब्द का अर्थ है : 1

(A) पत्रहीन

(B) रसहीन

(C) भावहीन

(D) पुष्पहीन

(iii) कबीरदास को पलाश के फूल क्यों पसंद नहीं थे ? 1

(A) संघर्ष शक्ति कम होने के कारण

(B) जीवन शक्ति कम होने के कारण

(C) महक न होने के कारण

(D) केवल वसंत में खिलने के कारण

(iv) निम्नलिखित कथन तथा कारण को ध्यानपूर्वक पढ़कर उचित विकल्प का चयन कर लिखिए : 1

कथन : शिरीष कालजयी अवधूत की भाँति जीवन की अजेयता का मंत्र प्रचार करता है।

कारण : विपरीत परिस्थितियों में भी, संघर्षों से लड़ अविचल बने रहने की जिजीविषा है।

विकल्प :

(A) कथन तथा कारण दोनों गलत हैं।

(B) कारण सही है, लेकिन कथन ग़लत है।

(C) कथन सही है, लेकिन कारण, कथन की सही व्याख्या नहीं करता है।

(D) कथन तथा कारण दोनों सही हैं तथा कारण, कथन की सही व्याख्या करता है।

(v) 'शिरीष का पुष्प लेखक के मानस में हिल्लोल क्यों पैदा करता है?' इस प्रश्न के उत्तर के लिए सही विकल्प का चयन कर लिखिए : 1

I. लेखक कवियों की भाँति भावुक और कोमल था ।

II. शिरीष के बाह्य रूप पर आकर्षित हो गया था।

III. शिरीष की कठिन जिजीविषा से प्रभावित हो गया था।

IV. गर्मी और उमस से भरे वातावरण में भी शिरीष फूलों से लदा था।

विकल्प :

(A) केवल IV (B) I और II दोनों

(C) II और III दोनों (D) III और IV दोनों

10		निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग **60** शब्दों में उत्तर दीजिए -	**2X3=6**
	(i)	'काले मेघा पानी दे' पाठ के आधार पर लिखिए कि इन्दरसेना को लेखक 'मेढक-मंडली' क्यों कहता था ? जीजी के बार-बार कहने पर भी वह इन्दरसेना पर पानी फेंकने को राजी क्यों नहीं होता ?	3
	(ii)	शिरीष के माध्यम से लेखक ने कालजयी अवधूत की भाँति विपरीत परिस्थितियों में भी अविचल खड़े रहने की प्रेरणा दी है। स्पष्ट कीजिए।	3
	(iii)	'पहलवान की ढोलक' पाठ के आधार पर सिद्ध कीजिए कि गाँव में फैली महामारी के समय प्रकृति भी मनुष्य के दुख में दुखी थी।	3
11		निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग **40** शब्दों में उत्तर दीजिए -	**2X2=4**
	(i)	'मेरी कल्पना का आदर्श समाज' शीर्षक के आधार पर लिखिए कि आंबेडकर के अनुसार आदर्श समाज की स्थापना के लिए क्या किया जाना चाहिए ?	2
	(ii)	केवल बाज़ार का पोषण करने वाले अर्थशास्त्र को लेखक ने अनीतिशास्त्र क्यों कहा है ? बाज़ार दर्शन पाठ के आधार पर लिखिए।	2
	(iii)	भक्तिन का कौन-सा गुण विस्मित कर देने वाला था और क्यों ?	2
12		निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के लगभग 100 शब्दों में उत्तर दीजिए: -	**2X5 = 10**
	(i)	सिल्वर वैडिंग' कहानी का प्रमुख पात्र वर्तमान में रहता है, किंतु अतीत को आदर्श मानता है। इससे उसके जीवन पर क्या प्रभाव पड़ा ? स्पष्ट कीजिए ।	5
	(ii)	जूझ' कहानी के संदर्भ में पारंपरिक पैतृक व्यवसायों के प्रति युवा पीढ़ी की विरक्ति के कारणों की समीक्षा कीजिए।	5
	(iii)	मुअनजो-दड़ो की सभ्यता को आडंबर विहीन सभ्यता क्यों कहा जाता है ? 'अतीत में दबे पाँव' पाठ के आधार पर स्पष्ट कीजिए।	5

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग

Kendriya Vidyalaya Sangathan, Ahmedabad Region

SET B

कक्षा बारहवीं प्री-बोर्ड- II परीक्षा 2025-26

Pre Board- II Examination 2025-26
SUBJECT : ENGLISH CORE (301)
CLASS: XII

M.M.: 80 **TIME: 3 HOURS**

General Instructions

Read the following instructions very carefully and strictly follow them:

I. This question paper has 13 questions. All questions are compulsory.

II. This question paper contains three sections: Section A: Reading Skills,
Section B: Creative Writing Skills
Section C: Literature.

III. Attempt all questions based on specific instructions for each part. Write the correct question number and part thereof in your answer sheet.

IV. Separate instructions are given with each question/part, wherever necessary.

V. Adhere to the prescribed word limit while answering the questions

SECTION A: READING SKILLS – 22 MARKS

1. **Read the following passage carefully:** 12

1. Willpower determines whether and how long we can follow through on our decisions. Interestingly, research suggests the general population is indeed aware of how essential willpower is to their wellbeing; survey participants routinely identify a 'lack of willpower' as the major impediment to making beneficial life changes. There are, however, misunderstandings surrounding the nature of willpower and how we can acquire more of it. There is a widespread misperception, for example, that increased leisure time would lead to subsequent increase in willpower.
2. Although the concept of willpower is often explained through single-word terms, such as 'resolve' or 'drive', it refers in fact to a variety of behaviours and situations. There is a common perception that willpower entails resisting some kind of a 'treat', such as a sugary drink or a lazy morning in bed, in favour of decisions that we know are better for us, such as drinking water or going to the gym. Of course this is a familiar phenomenon for all. Yet willpower also involves elements such as overriding negative thought processes, biting your tongue in social situations, or persevering through a difficult activity. At the heart of any

exercise of willpower, however, is the notion of 'delayed gratification', which involves resisting immediate satisfaction for a course that will yield greater or more permanent satisfaction in the long run.

3. Scientists are making general investigations into why some individuals are better able than others to delay gratification and thus employ their willpower, but the genetic or environmental origins of this ability remain a mystery for now. Some groups who are particularly vulnerable to reduced willpower capacity, such as those with addictive personalities, may claim a biological origin for their problems. What is clear is that levels of willpower typically remain consistent over time. A research by Matthew Gailliot suggests that willpower, even in the absence of physical activity, both requires and drains blood glucose levels, suggesting that willpower operates more or less like a 'muscle', and, like a muscle, requires fuel for optimum functioning.
4. Strengthening willpower thus relies on a two-pronged approach: reducing negative influences and improving positive ones. One of the most popular and effective methods simply involves avoiding willpower depletion triggers, and is based on the old adage, 'out of sight, out of mind'. In one study, workers who kept a bowl of enticing candy on their desks were far more likely to indulge than those who placed it in a desk drawer. It also appears that finding sources of motivation from within us may be important. (452 words)

Answer the following questions, based on the given passage. 12

I. What still remains a mystery concerning will power? 2

II. The statement that 'increased leisure time would lead to subsequent increases in willpower' is- 1

A. very true B. a wrong notion
C. a widespread fact D. sometimes true

III. Based on the passage give two instances to say that will power goes beyond a simple definition of 'resolve' or 'drive'. 1

IV. Choose the most appropriate option for the given phrase- 'lack of willpower'- 1

A. determines beneficial life changes
B. is not a negative trait
C. cannot be overcome
D. is a main obstacle in making favourable changes in life

V. Complete the statement: Gailliot compares will power to a muscle because_____ 1

VI. The word 'gratification' in para 3 is not an antonym of- 1

A. Dissatisfaction B. Satisfaction
C. Discontent D. Woefulness

VII. Discuss ways which reinforce our will power. (40 words) 2

VIII. The adage 'out of sight, out of mind' in the passage means- 1

A. enhances curiosity
B. strengthens willpower
C. reduces one's memory
D. weakens willpower

IX. How true is the statement that 'Willpower is the most significant factor in determining success in life.' (40 words) 2

2. **Read the passage carefully.** 10

I. Air pollution is a major threat to human health. The United Nations Environment Programme has estimated that, globally, 1.1 billion people breathe in unhealthy air. The World Health Organization (WHO) has estimated that urban air pollution is responsible for approximately 800,000 deaths and 4.6 million people lose their lives every year around the globe.

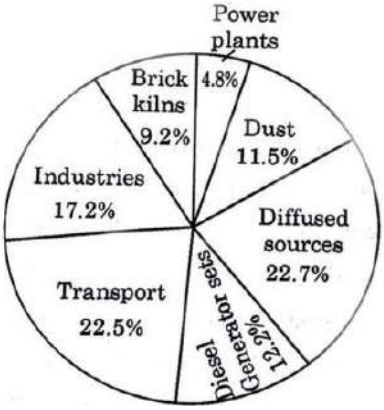
II. Traffic and transportation problems, inadequate drainage facilities, lack of open spaces, carbon emission, and the accumulation of waste aggravate the problem. Air pollution is associated with increased risk of acute respiratory infections (ARI), the principal cause of infant and child mortality in developing countries.

III. Urban air quality in most mega cities has been found to be critical and Kolkata is no exception to this. An analysis of ambient air quality in Kolkata was done by applying the Exceedance Factor (EF) method, where the presence of listed pollutants' (RPM, SPM, NO 2 and SO 2,) annual average concentration are classified into four different categories; namely critical, high, moderate, and low pollution. Out of a total of 17 ambient air quality monitoring stations operating in Kolkata, five fall under the critical category, and the remaining 12 locations fall under the high category of NO 2, concentration, while for RPM, four record critical, and 13 come under the high pollution category. The causes of high concentration of pollutants in the form of NO 2 and RPM have been identified in earlier studies as vehicular emission (51,4%), followed by industrial sources (24.5%) and dust particles (21.1%).

IV. Later, a health assessment was undertaken with a structured questionnaire at some nearby dispensaries which fall under areas with different ambient air pollution levels. Three dispensaries have been surveyed with 100 participants. It shows that respondents with respiratory diseases (85.1%) have outnumbered waterborne diseases (14.9%) and include acute respiratory infections (ARI) (60%), chronic obstructive pulmonary diseases (COPD) (7.8%), upper track respiratory infection (UTRI) (1.2%), Influenza (12.76), and acid-fast bacillus (AFB) (3.4%).

V. To live a healthy life and have better well-being, practicing pollution averting activities in one's day-to-day activities is needed. These pollution-averting practices can only be possible when awareness among the masses is generated that the air, they breathe outdoors, is not found to be safe.

Pollution in India



Answer the following questions, based on the given passage:

I. Select the option that displays the correct 'cause and effect' relationship. 1

A	B	C	D
Cause -Traffic and transportation problem Effect - 4.6 million deaths	Cause- Lack of open spaces Effect - Mega cities	Cause- Air pollution Effect- respiratory diseases	Cause - Air quality monitoring stations Effect -Emission of NO_2

II. Select the option that highlights the main idea of the passage. 1

A. To educate people about the threat of all kinds of pollution
B. To warn people of the threat of air pollution and educate about the safety measures.
C. To discuss the status of pollution in Kolkata and share the details of the study.
D. To educate people on Exceedance Factor method and share the results of the study.

III. Given a choice, where would you like to live in the context of the ideas discussed in the passage-Countryside or Metropolitan city? Justify your stand in about 40 words. 2

IV. The author's opinion on the development of Mega cities is- 1

A. Cities face transportation problem due to heavy traffic.
B. Urbanization leads to deterioration of air quality.
C. Mega cities are the right spots to study air pollution.
D. Cities face the problem of congestion.

V. Select the option that lists the author's recommendation to the people. 1

I. He wants people to be aware that air pollution is a major threat.
II. He urges people not to live in mega cities.
III. He advises people to follow pollution averting activities seriously.
IV. He wants people to reduce vehicular emissions.

A. i & ii B. ii & iii C. i & iii D. iii & iv

VI. Select the option that does not display the true statement as per fig.1. 1

A. Dust and power plants are the causes for maximum pollution.
B. Pollution caused by transport is much more than the pollution caused by industries.
C. Diesel generator comes only next to dust in causing air pollution.
D. Power plants contribute the least to air pollution

VII. It is not just one or two factors which worsen air pollution. There are other factors too which are responsible for the same. Substantiate these statements. 2

VIII. Which of the following statements is true? 1

A. Air quality in Kolkata is less than critical.
B. 12 locations were selected for measuring ambient air quality.
C. Most of the mega cities are suffering from the problem of poor air quality.
D. Accumulation of waste does not cause pollution

SECTION B: CREATIVE WRITING SKILLS (18 MARKS)

3. **Attempt ANY ONE of the two, A or B, in about 50 words** **1x4 =4**

A. You are Sneha/Sunil, the President of the Cultural Club of J K Public School, Jaipur. The club is celebrating Indian Ethnic Day to instill in students a sense of appreciation of India's rich cultural heritage. Write a notice for the school notice board, inviting students to participate in the celebrations. Invent necessary details.

OR

B. You are Sujata/Soham, the School Captain of Green Valley School, Mumbai. The school is organizing a dental check up for students of 6 to 12 in the last week of November 2024. Draft a notice in about 50 words, for the school notice board informing students about the camp. Invent necessary details.

4. **Attempt ANY ONE of the two, A or B, in about 50 words.** **1x4 =4**

A. You are Dr. Harish Balan, Sr. Pediatrician, AIMS, New Delhi. You have received an invitation from the Director, Health Service, CGHS, New Delhi, to preside over a gathering of leading medical practitioners attending a workshop on communicable diseases in children on 14th Nov, 2024 at 10:00 am in the National Institute of Homeo Sciences, New Delhi. Respond to accept the invitation.

OR

B. You are Ramana/ Renu, the Student Head, Cultural Affairs, at ABC Sr. Sec. School, Chennai . Your school is organising a 2-day Yoga camp over the weekend, for parents of the school students. Draft an invitation, inviting the school parents for the Yoga camp. Share information about the camp organisers and include other necessary details.

5. **Attempt ANY ONE of the two, A or B , in 120 150 words.** **1x5 =5**

A. You are Sushma /Suraj of Flat No. 4/A, Sneha Apartments, Civil Lines, New Delhi. You saw the following advertisement in The Hindu on 30th Oct 2024, and wish to apply for the job. Write your application giving your detailed resume.

SITUATION VACANT

Wanted a well-qualified and experienced Accountant for Whirlpool Company, Delhi. The candidate must be a graduate, with 3-4 years of experience and well versed in English and Hindi. Knowledge of Computer mandatory. Attractive salary offered. Apply to the Manager of the company with your bio data on or before 10 December 2024.

OR

B. There have been persistent issues faced by commuters or pedestrians using a few subways in Chennai, you are one of those facing a lot of inconvenience using the subways every day. Write a letter to the Editor of a local daily, Chennai regarding the poorly maintained subways and giving suggestions to address this issue .You are Sonal /Smith. Use the hints given in addition to your own observations.

- Broken tiles on the steps of the subway
- Flooding of subways during downpours or monsoons.
- Poor lighting - unsafe for use
- unsanitary conditions, garbage both inside and outside of subway.

6. **Attempt ANY ONE of the two, (A) or (B), in 120 150 words.** **1x5 =5**

A. Consuming adulterated food has let loose a Pandora's Box of physical disorders eroding the high life expectancy even in the age of advanced technology. As a columnist for an E-zine, write an article on the issue. You are Dr. Geetha/Dr. Goutham, New Delhi. Make use of the hints given.

FOOD FRAUD AND ADULTERATED INGREDIENTS

- Impure coconut oil
- Sugar in honey
- Food dye in green peas
- Papaya seeds in pepper
- Wax coating on apples etc.
- Health issues-diabetes, cardiovascular disease, Gastrointestinal issues, allergic reactions
- Toxicity of food leading to hospitalisation…

OR

B. Active youngsters of an NGO in Chennai visited your school to collect materials like uniform, books, stationery items, clothes, water bottles etc. and supplied the same to students of schools studying in villages and remote areas, as part of ***School to School Initiative***. As Rakesh/ Reeta - student coordinator of K M Public School, Chennai, write a report on this initiative for your school magazine. Make use of the hints given:

- Visit by the NGO.
- Objectives of their programme
- Their motivational talk in the morning assembly
- Items which were donated
- Mode of collection
- Students' response

SECTION C: LITERATURE - TEXTBOOKS(40 MARKS)

7. **Read the following extracts and answer the questions for ANY ONE of the given two-A or B.** **6x1 =6**

A. And such too is the grandeur of the dooms
We have imagined for the mighty dead;
All lovely tales that we have heard or read:
An endless fountain of immortal drink,
Pouring unto us from the heaven's brink. (A Thing of Beauty)

I. Which of the following themes is best represented in the given extract?
   A. The power of creativity and imagination.
   B. The inevitability of birth and death.
   C. The immortality of beauty represented by art and literature.
   D. The beauty of Nature around us.

II. State whether the given statement is TRUE or FALSE, with reference to the extract.

'By referring to the 'mighty dead' the poet emphasizes the power of people who have performed brave and noble deeds.'

III. Complete the sentence appropriately.
The "endless fountain of immortal drink" suggests……..

IV. In the expression 'immortal drink, Pouring unto us from the heaven's brink'. The word brink creates a powerful image of…….

V. Based on the rhyme scheme evident in lines 2-5, of the given extract, which of the words given would not rhyme with line 1?
A. looms B. roams C. tombs D. booms

VI. Select the option that is NOT true about the lack of punctuation at the end of line 1 in the extract.
   A. Creates a sense of continuity and flow that connects the line with the second line.
   B. Encourages the reader to continue reading seamlessly without any pause.
   C. Creates a sense of anticipation and expectation for the reader.
   D. Encourages a revisit to the ideas in the preceding lines.

OR

B. Those who prepare green wars,
wars with gas, wars with fire,
victory with no survivors,
would put on clean clothes and walk about with their
brothers in the shade, doing nothing.

I. Identify the expression which brings out the irony in war.

II. An ideal situation according to Pablo Neruda would be-

A. to wage different kinds of wars
B. to be active all the time
C. to experience universal silence and introspection
D. to learn several languages to communicate

III. Complete the following suitably.

The putting on of 'clean clothes' by the warmongers, symbolizes_____.

IV. Select the correct option from those given in brackets, to fill in the blank.

The extract tells us that the speaker (denounces / praises) the destructive nature of modern warfare.

V. Read the assertion and the reason below, with reference to the given extract.

Assertion: The poet advocates for 'doing nothing' as a way to prevent the devastation of war.

Reason: 'Doing nothing' suggests suspending all our activities for a while, and engaging ourselves in self-analysis.

Choose the correct option regarding their relationship.

A. Both the assertion and the reason are true, and the reason is the correct explanation of the assertion.
B. Both the assertion and the reason are true, but the reason is not the correct explanation of the assertion.
C. The assertion is true, but the reason is false.
D. The assertion is false, but the reason is true.

VI. What does the expression 'brothers' in the extract convey?

8. **Read the following extracts and answer the questions for ANY ONE of the given two, A or B.** **1x4 =4**

A. Students on Ice, the programme I was working with on the Shokalskiy, aims to do exactly this by taking high school students to the ends of the world and providing them with inspiring educational opportunities which will help them foster a new understanding and respect for our planet. It's been in operation for six years now, headed by Canadian Geoff Green, who got tired of carting celebrities and retired, rich, curiosity-seekers who could only 'give' back in a limited way. With Students on Ice, he offers the future generation of policymakers a life-changing experience at an age when they're ready to absorb, learn, and most importantly, act.

I. Fill in the blank suitably .

Students on Ice is ..... (an expedition / a navigation) headed by Geoff Green.

II. Choose the option that marks the ODD ONE OUT based on your reading of the above extract.

A. Manoj donates 10% of his monthly income to the environment-friendly NGOs.
B. Sherly and her twin plant a new plant on their birthday every year.
C. Ram invests in eco-friendly cosmetics that are packaged in plastic containers.
D. Aisha plans to device a machine that recycles the biodegradable wastes from home.

III. Green found carting celebrities, the rich and the retired to the South Pole futile. Say why you would agree with this idea.

. In what way was Geoff Green justified in planning a programme for students ?

OR

B. DERRY: What do you do all day?

MR LAMB: Sit in the sun. Read books. Ah, you thought it was an empty house, but inside, it's full. Books and other things. Full.

DERRY: But there aren't any curtains at the windows.

MR LAMB: I'm not fond of curtains. Shutting things out, shutting things in. I like the light and the darkness, and the windows open, to hear the wind.

DERRY: Yes. I like that. When it's raining, I like to hear it on the roof.

MR LAMB: So, you're not lost, are you? Not altogether? You do hear things. You listen.

DERRY: They talk about me. Downstairs, When I'm not there.

I. List any two emotions Derry experiences as he talks to Mr Lamb.

II. According to Mr. Lamb, what does the idea of being 'lost' signify?

A. He who does not hear what other people say is lost.
B. He who does not appreciate man and nature is lost.
C. He who pauses to reflect on wind and rain is lost.
D. He who is closed off to nature and its wonders is lost.

III. Not being fond of curtains brings out the fact that Mr. Lamb_____. Fill in the blank in a suitable way.

IV. Give an instance to say that Derry is gradually opening up to Mr. Lamb.

9. **Read the following extracts and answer the questions for <u>any one</u> of the given two, A or B.** **1x6 =6**

A. "Since you have been so nice to me all day long, as if I was a captain, I want to be nice to you, in return, as if I was a real captain — for I do not want you to be embarrassed at this Christmas season by a thief; but you can give back the money to the old man on the roadside, who has the money pouch hanging on the window frame as a bait for poor wanderers. The rattrap is a Christmas present from a rat who would have been caught in this world's rattrap if he had not been raised to captain, because in that way he got power to clear himself. "Written with friendship and high regard, Captain von Stahle."

I. Which of the following CANNOT be attributed to the peddler, according to the extract given?

A. Indebtedness B. reform C. self-pity D. self-awareness

II. Why did the peddler gift a rattrap as a Christmas present?

III. Choose the option that DOES NOT list the meaning of 'frame'.

1. A person's body with reference to its size or build
2. A single complete picture in a series forming a cinema, television, or video film
3. The triangular structure for positioning the red balls in soccer.
4. A thin solid object that seals a container or hole: a lid

A. Option 1 B. Option 2 C. Option 3 D. Option 4

IV. How was the crofter also responsible for enticing a thief like the peddler?

V. The peddler signs himself as 'Captain Von Stahle' to convey that_____(Compete it suitably).

VI. The climax of the story upholds the writer's belief in the essential goodness of human beings. Say whether the statement is True/False.

OR

B. His success in films overshadowed and dwarfed his literary achievements-or so his critics felt. He composed several truly original 'story poems' in folk refrain and diction and also wrote a sprawling novel Thillana Mohanambal with dozens of very deftly etched characters. He quite successfully recreated the mood and manner of the Devadasis of the early 20th century. He was an amazing actor-he never aspired to the lead roles-but whatever subsidiary role he played in any of the films, he performed better than the supposed main players. He had a genuine love for anyone he came across and his house was a permanent residence for dozens of near and far relations and acquaintances.

I. Why did Kothamangalam Subbu's success in films tower above his literary accomplishments?

II. The word 'sprawling' has been used with the word 'novel' But it is not appropriate to use with (choose the option)

A. metropolis B. market C. campus D. portrait

III. What makes Asoka Mitran say that Kothamangalam Subbu's novel Thillana Mohanambal has 'deftly etched characters?

IV. Pick the option that best describes Subbu according to the extract.

1. benevolent
2. powerful
3. accomplished
4. witty
5. generous
6. temperamental

1. 4, 5 & 6
2. 2, 3 & 4
3. 1,3 & 5
4. 3 ,4 & 6

V. Subordinate is one of the antonyms of the word _____given in the extract

VI. A talented person like Subbu can rightly be described as _____(versatile/ charitable).Choose the most appropriate word.

VII.

10. **Answer <u>any five</u> of the following six questions in 40 50 words each :** **5x2= 10**

1. Evaluate the two different perspectives to life that Jansie and Sophie represent.
2. Mukund Padmanabhan proves himself to be a successful interviewer. How does he sustain our interest as he interviews Umberto Eco?
3. How did the village elders show their solidarity for the outgoing French teacher M. Hamel?
4. 'What embroidery was to Aunt Jennifer; poetry was for Adrienne Rich'. Comment with reference to the poem 'Aunt Jennifer's Tigers'.
5. If you could give the lesson 'Deep Water' a new title, what would it be? Justify your answer.
6. Though money holds the same value everywhere, the poet draws a distinction between city money and country money. Elaborate. (A Roadside Stand).
7.

11. **Answer <u>any two</u> of the following three questions in 40-50 words each :** **2x2=4**

1. *Sam's refuge into the third level and going to the past gains more significance in 'The Third Level'* . Recounting the content of his letter to Charley from Galesburg, justify this statement.
2. Mr. Lamb leaves an indelible mark on Derry's mind. He succeeds in bringing him out from his shell and opening up a panorama of nature's beauty. How does he do so? (On the Face of it).
3. What solution does Annan offer Bama to overcome the pain of discrimination? (My Memories of Childhood).

12. **Answer <u>any one</u> of the following two questions, in about 120-150 words.** **1x5=5**

A. Imagine Sophie's father finds out about Sophie's going to the canal to 'meet' Danny Casey and returning home with a great sense of disillusionment. He is infuriated and prohibits Sophie from going anywhere except to school. As Geoff, write a diary entry disapproving of your father's punishment by citing your reasons for being sympathetic to Sophie. You may begin this way:

Monday, 2 September 8 PM.

I cannot get myself to stand with father in his tirade against Sophie.

OR

B. Imagine Gandhi were to deliver a speech to students in present day India showing them the path to becoming responsible world leaders. Based on your understanding of Gandhi's own leadership, skills, write a speech, as Gandhi, addressing the students about the qualities that every leader and politician should nurture.

Dear students,
You are all leaders of social change. I see many bright and enthusiastic faces that assure me that our future is in good hands. I have learnt from my own experience……(continue)…….

13. **Answer any one of the following two questions, in about 120-150 words:** **1x5=5**

A. National Wildlife Day is celebrated every year on September 4 .This day aims to remind the importance of conservation efforts to improve the natural world. As a member of the Eco club of your school you delivered a speech on the significance of the day alluding to the whims and fancies of the Tiger King who was known for his callous and ruthless attitude towards tigers. Write your speech bringing out the arrogance and obsession of the King and the punishment destiny had for him. You are Prithvi/Prakruti.

OR

B. People look up to doctors with great respect for the service they render to humanity. March 30 is Doctors' Day, an annual observance aimed at appreciating physicians who help save our lives everywhere. Referring to the significance of the day and Dr. Sadao's role in the story 'The Enemy' write an article for a leading newspaper. You are Mohan/Meena.

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग

Kendriya Vidyalaya Sangathan, Ahmedabad Region

SET - A

कक्षा बारहवीं प्री-बोर्ड II परीक्षा 2025-26

Pre Board II Examination 2025-26

SUBJECT : ENGLISH CORE (301)

CLASS: XII

MAX. MARKS: 80 **TIME ALLOWED : 3 HOURS**

General Instructions

Read the following instructions very carefully and strictly follow them:

I. This question paper has 13 questions. All questions are compulsory.

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Section A: Reading Skills
Section B: Creative Writing Skills
Section C: Literature

III. Attempt all questions based on specific instructions for each part. Write the correct question number and part thereof in your answer sheet.

IV. Separate instructions are given with each question/part, wherever necessary.

V. Adhere to the prescribed word limit while answering the questions.

SECTION A: READING SKILLS – 22 MARKS

1. **Read the following passage carefully:** 12

1. Willpower determines whether and how long we can follow through on our decisions. Interestingly, research suggests the general population is indeed aware of how essential willpower is to their wellbeing; survey participants routinely identify a 'lack of willpower' as the major impediment to making beneficial life changes. There are, however, misunderstandings surrounding the nature of willpower and how we can acquire more of it. There is a widespread misperception, for example, that increased leisure time would lead to subsequent increase in willpower.
2. Although the concept of willpower is often explained through single-word terms, such as 'resolve' or 'drive', it refers in fact to a variety of behaviours and situations. There is a common perception that willpower entails resisting some kind of a 'treat', such as a sugary drink or a lazy morning in bed, in favour of decisions that we know are better for us, such as drinking water or going to the gym. Of course this is a familiar phenomenon for all. Yet willpower also involves elements such as overriding negative thought processes, biting your tongue in social situations, or persevering through a difficult activity. At the heart of any exercise of willpower, however, is the notion of 'delayed gratification', which involves resisting immediate satisfaction for a course that will yield greater or more permanent satisfaction in the long run.
3. Scientists are making general investigations into why some individuals are better able than others to delay gratification and thus employ their willpower, but the genetic or environmental origins of this ability remain a mystery for now. Some

groups who are particularly vulnerable to reduced willpower capacity, such as those with addictive personalities, may claim a biological origin for their problems. What is clear is that levels of willpower typically remain consistent over time. A research by Matthew Gailliot suggests that willpower, even in the absence of physical activity, both requires and drains blood glucose levels, suggesting that willpower operates more or less like a 'muscle', and, like a muscle, requires fuel for optimum functioning.

4. Strengthening willpower thus relies on a two-pronged approach: reducing negative influences and improving positive ones. One of the most popular and effective methods simply involves avoiding willpower depletion triggers, and is based on the old adage, 'out of sight, out of mind'. In one study, workers who kept a bowl of enticing candy on their desks were far more likely to indulge than those who placed it in a desk drawer. It also appears that finding sources of motivation from within us may be important. (452 words)

Answer the following questions, based on the given passage. 12

I. Choose the most appropriate option for the given phrase- 'lack of willpower'- 1

A. determines beneficial life changes

B. is not a negative trait

C. cannot be overcome

D. is a main obstacle in making favourable changes in life

II. The statement that 'increased leisure time would lead to subsequent increases in willpower' is- 1

A. very true B. a wrong notion

C. a widespread fact D. sometimes true

III. Based on the passage give two instances to say that will power goes beyond a simple definition of 'resolve' or 'drive'. 1

IV. What still remains a mystery concerning will power? 2

V. Complete the statement: Gailliot compares will power to a muscle because_____ 1

VI. The word 'gratification' in para 3 is not an antonym of- 1

A. Dissatisfaction B. Satisfaction

C. Discontent D. Woefulness

VII. Discuss ways which reinforce our will power. (40 words) 2

VIII. The adage 'out of sight, out of mind' in the passage means- 1

A. weakens willpower B. strengthens willpower

C. reduces one's memory D. enhances curiosity

IX. How true is the statement that 'Willpower is the most significant factor in determining success in life.' (40 words) 2

1. **Read the passage carefully.** 10

I. Air pollution is a major threat to human health. The United Nations Environment Programme has estimated that, globally, 1.1 billion people breathe in unhealthy air. The World Health Organization (WHO) has estimated that urban air pollution is responsible for approximately 800,000 deaths and 4.6 million people lose their lives every year around the globe.

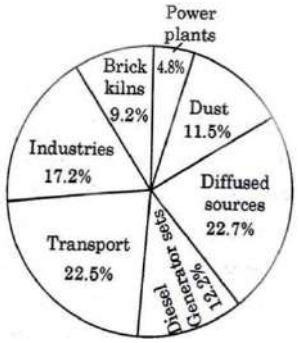
II. Traffic and transportation problems, inadequate drainage facilities, lack of open spaces, carbon emission, and the accumulation of waste aggravate the problem. Air pollution is associated with increased risk of acute respiratory infections (ARI), the principal cause of infant and child mortality in developing countries.

III. Urban air quality in most mega cities has been found to be critical and Kolkata is no exception to this. An analysis of ambient air quality in Kolkata was done by applying the Exceedance Factor (EF) method, where the presence of listed pollutants' (RPM, SPM, NO 2 and SO 2,) annual average concentration is classified into four different categories; namely critical, high, moderate, and low pollution. Out of a total of 17 ambient air quality monitoring stations operating in Kolkata, five fall under the critical category, and the remaining 12 locations fall under the high category of NO 2, concentration, while for RPM, four record critical, and 13 come under the high pollution category. The causes of high concentration of pollutants in the form of NO 2 and RPM have been identified in earlier studies as vehicular emission (51,4%), followed by industrial sources (24.5%) and dust particles (21.1%).

IV. Later, a health assessment was undertaken with a structured questionnaire at some nearby dispensaries which fall under areas with different ambient air pollution levels. Three dispensaries have been surveyed with 100 participants. It shows that respondents with respiratory diseases (85.1%) have outnumbered waterborne diseases (14.9%) and include acute respiratory infections (ARI) (60%), chronic obstructive pulmonary diseases (COPD) (7.8%), upper track respiratory infection (UTRI) (1.2%), Influenza (12.76), and acid-fast bacillus (AFB) (3.4%).

V. To live a healthy life and have better well-being, practicing pollution averting activities in one's day-to-day activities is needed. These pollution-averting practices can only be possible when awareness among the masses is generated that the air, they breathe outdoors, is not found to be safe.

Pollution in India



Answer the following questions, based on the given passage:

I. Select the option that displays the correct 'cause and effect' relationship. 1

A	B	C	D
Cause -Traffic and transportation problem Effect - 4.6 million deaths	Cause- Lack of open spaces Effect - Mega cities	Cause- Air pollution Effect- Respiratory diseases	Cause - Air quality monitoring stations Effect -Emission of NO_2

II. Select the option that highlights the main idea of the passage. 1

A. To educate people about the threat of all kinds of pollution.
B. To warn people of the threat of air pollution and educate about the safety measures.
C. To discuss the status of pollution in Kolkata and share the details of the study.
D. To educate people on Exceedance Factor method and share the results of the study.

III. Given a choice, where would you like to live in the context of the ideas discussed in the passage- Countryside or a Metropolitan city? Justify your stand in about 40 words. 2

IV. The author's opinion on the development of mega cities is- 1

A. Cities face transportation problem due to heavy traffic.
B. Urbanization leads to deterioration of air quality.
C. Mega cities are the right spots to study air pollution.
D. Cities face the problem of congestion.

V. Select the option that lists the author's recommendation to the people. 1

i. He wants people to be aware that air pollution is a major threat.
ii. He urges people not to live in mega cities.
iii. He advises people to follow pollution averting activities seriously.
iv. He wants people to reduce vehicular emissions.

A. i & ii
B. ii & iii
C. i & iii
D. iii & iv

VI. Select the option that does not display the true statement as per fig.1. 1

A. Dust and power plants are the causes for maximum pollution.
B. Pollution caused by transport is much more than the pollution caused by industries.
C. Diesel generator comes only next to dust in causing air pollution.
D. Power plants contribute the least to air pollution

VII. It is not just one or two factors which worsen air pollution. There are other factors too which are responsible for the same. Substantiate these statements. 2

VIII. Which of the following statements is true? 1

A. Air quality in Kolkata is less than critical.
B. 12 locations were selected for measuring ambient air quality.
C. Most of the mega cities are suffering from the problem of poor air quality.
D. Accumulation of waste does not cause pollution

SECTION B: CREATIVE WRITING SKILLS (18 MARKS)

3. **Attempt <u>ANY ONE</u> of the two, A or B, in about 50 words**

A. You are Monisha / Mohan, the President of the Cultural Club of J K Public School, Bengaluru. The club is celebrating Indian Ethnic Day to instill in students a sense of appreciation of India's rich cultural heritage. Write a notice for the school notice board, inviting students to participate in the celebrations. Invent necessary details. **1x4 =4**

OR

B. You are Rita/Robert, the School Captain of Rotary School, Mysuru. The school is organizing a dental checkup for students of 6 to 12 in the last week of November 2024. Draft a notice in about 50 words, for the school notice board informing students about the camp. Invent necessary details.

4. **Attempt <u>ANY ONE</u> of the two, A or B, in about 50 words.** **1x4 =4**

A. You are Dr. Harish Balan, Sr. Pediatrician, AIMS, New Delhi. You have received an invitation from the Director, Health Service, CGHS, New Delhi, to preside over a gathering of leading medical practitioners attending a workshop on communicable diseases in children on 14th Nov, 2024 at 10:00 am in the National Institute of Homeo Sciences, New Delhi. Respond to accept the invitation.

OR

B. You are Ramana/ Renu, the Student Head, Cultural Affairs, at ABC Sr. Sec. School, Chennai . Your school is organising a 2-day Yoga camp over the weekend, for parents of the school students. Draft an invitation, inviting the school parents for the Yoga camp. Share information about the camp organisers and include other necessary details.

5. **Attempt <u>ANY ONE</u> of the two, A or B , in 120 150 words.** **1x5 =5**

A. You are Sushma /Suraj of Flat No. 4/A, Sneha Apartments, Civil Lines, New Delhi. You saw the following advertisement in The Hindu on 30th Oct 2024, and wish to apply for the job. Write your application giving your detailed resume.

SITUATION VACANT

Wanted a well-qualified and experienced Accountant for Whirlpool Company, Delhi. The candidate must be a graduate, with 3-4 years of experience and well versed in English and Hindi. Knowledge of Computer mandatory. Attractive salary offered. Apply to the Manager of the company with your bio data on or before 10 December 2024.

OR

B. There have been persistent issues faced by commuters or pedestrians using a few subways in Chennai, you are one of those facing a lot of inconvenience using the subways every day. Write a letter to the Editor of a local daily, Chennai regarding the poorly maintained subways and giving suggestions to address this issue .You are Sonal /Smith. Use the hints given in addition to your own observations.

- Broken tiles on the steps of the subway
- Flooding of subways during downpours or monsoons.
- Poor lighting - unsafe for use
- Unsanitary conditions, garbage both inside and outside of subway.

6. **Attempt <u>ANY ONE</u> of the two, (A) or (B), in 120 150 words.** **5**

A. Consuming adulterated food has let loose a Pandora's Box of physical disorders eroding the high life expectancy even in the age of advanced technology. As a columnist for an E-zine, write an article on the issue. You are Dr. Geetha/Dr.Goutham, New Delhi. Make use of the hints given.

OR

FOOD FRAUD AND ADULTERATED INGREDIENTS

- Impure coconut oil
- Sugar in honey
- Food dye in green peas
- Papaya seeds in pepper
- Wax coating on apples etc.
- Health issues-diabetes, cardiovascular disease, Gastrointestinal issues, allergic reactions
- Toxicity of food leading to hospitalisation…

B. Active youngsters of an NGO in Chennai visited your school to collect materials like uniform, books, stationery items, clothes, water bottles etc. and supplied the same to students of schools studying in villages and remote areas, as part of ***School to School Initiative***. As Rakesh/ Reeta - student coordinator of K M Public School, Chennai, write a report on this initiative for your school magazine. Make use of the hints given:

- Visit by the NGO.
- Objectives of their programme
- Their motivational talk in the morning assembly
- Items which were donated
- Mode of collection
- Students' response

SECTION C: LITERATURE - TEXTBOOKS(40 MARKS)

7. **Read the following extracts and answer the questions for <u>ANY ONE</u> of the given two-A or B.** **6x1 =6**

A. And such too is the grandeur of the dooms
We have imagined for the mighty dead;
All lovely tales that we have heard or read:
An endless fountain of immortal drink,
Pouring unto us from the heaven's brink. (A Thing of Beauty)

i. Which of the following themes is best represented in the given extract?

A. The power of creativity and imagination
B. The beauty of Nature around us
C. The immortality of beauty represented by art and literature
D. The inevitability of birth and death

ii. State whether the given statement is TRUE or FALSE, with reference to the extract.

'By referring to the 'mighty dead' the poet emphasizes the power of people who have performed brave and noble deeds.'

I. Complete the sentence appropriately.
The "endless fountain of immortal drink" suggests……..

II. In the expression 'immortal drink, Pouring unto us from the heaven's brink'. The word brink creates a powerful image of_____.

III. Based on the rhyme scheme evident in lines 2-5, of the given extract, which of the words given would not rhyme with line 1?

A. looms B. roams C. tombs D. booms

VI. Select the option that is NOT true about the lack of punctuation at the end of line 1 in the extract.

A. Creates a sense of continuity and flow that connects the line with the second line.
B. Encourages the reader to continue reading seamlessly without any pause.
C. Creates a sense of anticipation and expectation for the reader.
D. Encourages a revisit to the ideas in the preceding lines.

OR

B. Those who prepare green wars,
wars with gas, wars with fire,
victory with no survivors,
would put on clean clothes and walk about with their
brothers in the shade, doing nothing.

I. Identify the expression which brings out the irony in war.

II. An ideal situation according to Pablo Neruda would be-

A. to wage different kinds of wars
B. to be active all the time
C. to experience universal silence and introspection
D. to learn several languages to communicate

III. Complete the following suitably.
The putting on of 'clean clothes' by the warmongers, symbolizes_____.

IV. Select the correct option from those given in brackets, to fill in the blank.

The extract tells us that the speaker (denounces / praises) the destructive nature of modern warfare.

V. Read the assertion and the reason below, with reference to the given extract.

Assertion: The poet advocates for 'doing nothing' as a way to prevent the devastation of war.

Reason: 'Doing nothing' suggests suspending all our activities for a while, and engaging ourselves in self-analysis.

Choose the correct option regarding their relationship.

A. Both the assertion and the reason are true, and the reason is the correct explanation of the assertion.
B. Both the assertion and the reason are true, but the reason is not the correct explanation of the assertion.
C. The assertion is true, but the reason is false.
D. The assertion is false, but the reason is true

VI. What does the expression 'brothers' in the extract convey?

8. Read the following extracts and answer the questions for any one of the given two, A or B. **1x4 =4**

A. Students on Ice, the programme I was working with on the Shokalskiy, aims to do exactly this by taking high school students to the ends of the world and providing them with inspiring educational opportunities which will help them foster a new understanding and respect for our planet. It's been in operation for six years now, headed by Canadian Geoff Green, who got tired of carting celebrities and retired, rich, curiosity-seekers who could only 'give' back in a limited way. With Students on Ice, he offers the future generation of policymakers a life-changing experience at an age when they're ready to absorb, learn, and most importantly, act.

I. Fill in the blank suitably .

Students on Ice is ..... (an expedition / a navigation) headed by Geoff Green.

II. Choose the option that marks the ODD ONE OUT based on your reading of the above extract.

A. Manoj donates 10% of his monthly income to the environment-friendly NGOs.
B. Sherly and her twin plant a new plant on their birthday every year.
C. Ram invests in eco-friendly cosmetics that are packaged in plastic containers.
D. Aisha plans to device a machine that recycles the biodegradable wastes from home.

III. Green found carting celebrities, the rich and the retired to the South Pole futile. Say why you would agree with this idea.

. In what way was Geoff Green justified in planning a programme for students ?

OR

B. DERRY: What do you do all day?
MR LAMB: Sit in the sun. Read books. Ah, you thought it was an empty house, but inside, it's full. Books and other things. Full.
DERRY: But there aren't any curtains at the windows.
MR LAMB: I'm not fond of curtains. Shutting things out, shutting things in. I like the light and the darkness, and the windows open, to hear the wind.
DERRY: Yes. I like that. When it's raining, I like to hear it on the roof.
MR LAMB: So you're not lost, are you? Not altogether? You do hear things. You listen.
DERRY: They talk about me. Downstairs, When I'm not there.

I. List any two emotions Derry experiences as he talks to Mr Lamb.

II. According to Mr. Lamb, what does the idea of being 'lost' signify?

A. He who does not hear what other people say is lost.
B. He who does not appreciate man and nature is lost.
C. He who pauses to reflect on wind and rain is lost.
D. He who is closed off to nature and its wonders is lost.

III. Not being fond of curtains brings out the fact that Mr. Lamb_____. Fill in the blank in a suitable way.

IV. Give an instance to prove that Derry is gradually opening up to Mr. Lamb.

9. **Read the following extracts and answer the questions for <u>ANY ONE</u> of the given two, A or B.** **1x6 =6**

A. "Since you have been so nice to me all day long, as if I was a captain, I want to be nice to you, in return, as if I was a real captain — for I do not want you to be embarrassed at this Christmas season by a thief; but you can give back the money to the old man on the roadside, who has the money pouch hanging on the window frame as a bait for poor wanderers. The rattrap is a Christmas present from a rat who would have been caught in this world's rattrap if he had not been raised to captain, because in that way he got power to clear himself. "Written with friendship and high regard, Captain von Stahle."

I. Which of the following CANNOT be attributed to the peddler, according to the extract given?

A. indebtedness
B. reform
C. self-pity
D. self-awareness

II. Why did the peddler gift a rattrap as a Christmas present?

III. Choose the option that DOES NOT list the meaning of 'frame'.

1. A person's body with reference to its size or build
2. A single complete picture in a series forming a cinema, television, or video film
3. The triangular structure for positioning the red balls in soccer.
4. A thin solid object that seals a container or hole: a lid

A. Option 1
B. Option 2
C. Option 3
D. Option 4

IV. How was the crofter also responsible for enticing a thief like the peddler?

V. The peddler signs himself as 'Captain Von Stahle' to convey that_____(Compete it suitably).

VI. The climax of the story upholds the writer's belief in the essential goodness of human beings. Say whether the statement is True/False.

OR

B. His success in films overshadowed and dwarfed his literary achievements-or so his critics felt. He composed several truly original 'story poems' in folk refrain and diction and also wrote a sprawling novel Thillana Mohanambal with dozens of very deftly etched characters. He quite successfully recreated the mood and manner of the Devadasis of the early 20th century. He was an amazing actor-he never aspired to the lead roles-but whatever subsidiary role he played in any of the films, he performed better than the supposed main players. He had a genuine love for anyone he came across and his house was a permanent residence for dozens of near and far relations and acquaintances.

I. Why did Kothamangalam Subbu's success in films tower above his literary accomplishments?

II. The word 'sprawling' has been used with the word 'novel' But it is not appropriate to use with (choose the option)

A. metropolis

B. market

C. campus

D. portrait

III. What makes Asoka Mitran say that Kothamangalam Subbu's novel Thillana Mohanambal has 'deftly etched characters?

IV. Pick the option that best describes Subbu according to the extract.

1. benevolent
2. powerful
3. accomplished
4. witty
5. generous
6. temperamental

1. 4, 5 & 6
2. 2, 3 & 4
3. 1,3 & 5
4. 3 ,4 & 6

V. Subordinate is one of the antonyms of the word _____given in the extract

VI. A talented person like Subbu can rightly be described as _(versatile/ charitable).Choose the most appropriate word.

10. **Answer <u>any five</u> of the following six questions in 40 50 words each :** **5x2= 10**

1. Evaluate the two different perspectives to life that Jansie and Sophie represent.
2. Mukund Padmanabhan proves himself to be a successful interviewer. How does he sustain our interest as he interviews Umberto Eco?
3. How did the village elders show their solidarity for the outgoing French teacher, M. Hamel?
4. 'What embroidery was to Aunt Jennifer; poetry was for Adrienne Rich'. Comment with reference to the poem 'Aunt Jennifer's Tigers'.
5. If you could give the lesson 'Deep Water' a new title, what would it be? Justify your answer.
6. Though money holds the same value everywhere, the poet draws a distinction between city money and country money. Elaborate. (A Roadside Stand).

11. **Answer <u>any two</u> of the following three questions in 40-50 words each :** **2x2= 4**

1. *Sam's refuge into the third level and going to the past gains more significance in 'The Third Level'* . Recounting the content of his letter to Charley from Galesburg justify this statement.
2. Mr. Lamb leaves an indelible mark on Derry's mind. He succeeds in bringing him out from his shell and opening up a panorama of nature's beauty. How does he do so? (On the Face of it).
3. What solution does Annan offer Bama to overcome the pain of discrimination? (My Memories of Childhood).

12. **Answer <u>any one</u> of the following two questions, in about 120-150 words.** **5**

A. Imagine Sophie's father finds out about Sophie's going to the canal to 'meet' Danny Casey and returning home with a great sense of disillusionment. He is infuriated and prohibits Sophie from going anywhere except to school. As Geoff, write a diary entry disapproving of your father's punishment by citing your reasons for being sympathetic to Sophie. You may begin this way:

Monday, 2 September 8 PM.

I cannot get myself to stand with father in his tirade against Sophie.

OR

B. Imagine Gandhi were to deliver a speech to students in present day India showing them the path to becoming responsible world leaders. Based on your understanding of Gandhi's own leadership, skills, write a speech, as Gandhi, addressing the students about the qualities that every leader and politician should nurture.

Dear students,
You are all leaders of social change. I see many bright and enthusiastic faces that assure me that our future is in good hands. I have learnt from my own
experience……(continue)…….

13. **Answer <u>any one</u> of the following two questions, in about 120-150 words:** **5**

A. National Wildlife Day is celebrated every year on September 4 .This day aims to remind the importance of conservation efforts to improve the natural world. As a member of the Eco club of your school you delivered a speech on the significance of the day alluding to the whims and fancies of the Tiger King who was known for his callous and ruthless attitude towards tigers. Write your speech bringing out the arrogance and obsession of the King and the punishment destiny had for him. You are Prithvi/Prakruti.

OR

B. People look up to doctors with great respect for the service they render to humanity. March 30 is Doctors' Day, an annual observance aimed at appreciating physicians who help save our lives everywhere. Referring to the significance of the day and Dr. Sadao's role in the story 'The Enemy' write an article for a leading newspaper. You are Mohan/Meena.

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग **(SET-B)**

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

द्वितीय प्री–बोर्ड परीक्षा – 2025-26

SECOND PRE-BOARD EXAMINATION- 2025-26

SUBJECT: POLITICAL SCIENCE (028) **Max. Marks: 80**

CLASS: XII **TIME: 3 Hours**

GENERAL INSTRUCTIONS:

1. The question paper consists of five sections (A, B, C, D and E) with 30 questions in total.
2. All questions are compulsory.
3. Question numbers 1-12 are multiple choice questions of one mark each.
4. Question numbers 13-18 are of 2 marks each. Answer to these questions should not exceed 50-60 words each.
5. Question numbers 19-23 are of 4 marks each. Answer to these questions should not exceed100-120 words each.
   There is an internal choice in two of the 4 marks questions.
6. Question 24-26 are passage, cartoon and map-based questions of 4 Marks each. Answer accordingly.
7. Question numbers 27-30 are of 6 marks each. Answer to these questions should not exceed170-180 words each.
8. There is an internal choice in 6 marks questions.

Q.NO		MARKS
	SECTION- A (12 MARKS)	
1.	**What is the significance of the SAARC organization in South Asia?**	1
A	It promotes economic cooperation and regional integration among South Asian countries.	
B	It has successfully resolved all regional conflicts.	
C	It focuses solely on military alliances in the region.	
D	It is primarily concerned with environmental issues.	
2.	**What is the full form of LTTE?**	1
A	Liberated Tigers of Tamil Eelam	
B	Liberated Troops of Telugu Eelam	
C	Liberation Tigers of Tamil Eelam	
D	Liberation Troops of Tamil Eelam	

3.	**In 2006, How many member states did the UN have?**	1
A	200	
B	196	
C	192	
D	195	
Directions (Q No. 4 and 5) In the questions given below there are two statements marked as Assertion (A) and Reason (R). Read these statements and Choose the correct option. **Codes** 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.		
4.	**Assertion (A):** The UN is not a great balance to the US. **Reason(R):** The UN can and has served to bring the US and the rest of the world into discussions over various issues	1
5	**Assertion (A):** Sustainable development is necessary for the survival of future generations. **Reason (R):** Sustainable development means using resources for present needs without compromising future needs.	1
6.	**Which of the following statements about the environment are correct?** **(**i) Environmental concerns are part of the global politics. (ii) A conference on the environment was held in Rio-de-Janeiro in 1992. (iii) The UN has assigned the environmental programmers to the UN Human Rights Commission. (iv) The Earth Summit was organized by the United Nations. Choose the correct option.	1
A	(i), (iii), (iv)	
B	(ii), (iii), (iv)	
C	(i), (ii), (iii)	
D	(i). (ii) and (iv)	
7.	**Which of the following are the consequences of India's Partition in 1947?** (i) Communal violence (ii) Lakhs of people had to migrate from one place to another (iii) Parliamentary system of governance. (iv) Reorganisation of State	1

A	(i) and (ii)	
B	(ii) and (iv)	
C	(i) and (iii)	
D	(iii) and (iv)	
8.	Name the original state from which Chhattisgarh was carved out.	1
A	Uttar Pradesh	
B	Madhya Pradesh	
C	Jharkhand	
D	Bihar	
9.	**Which of the following statements about the Grand Alliance of 1971 is correct? The Grand Alliance _____**	1
A	was formed by all non-Congress parties	
B	had a clean political and ideological programme	
C	was formed by Communist non-Congress parties	
D	was formed by non-Communist non-Congress parties	
10.	**The term "Aya Ram, Gaya Ram" is associated with :**	1
A	Green Revolution	
B	Decentralization	
C	Corruption	
D	Politics of Defection	
11.	**Identify the Prime Minister of India from amongst the following who headed the first Coalition Government in India**	1
A	Atal Bihari Vajpayee	
B	V.P. Singh	
C	H.D. Deve Gowda	
D	Morarji Desai	
12.	**Which Political event in India marked a significant shift towards the "Growing Consensus" after 1990?**	1
A	Implementation of reservation policies for marginalized communities	

B	Passage of the Right to Information Act	
C	Introduction of economic liberalization reforms	
D	Ratification of international human rights conventions	
	SECTION – B (12 Marks)	
13.	What was the Marshall Plan? How did it pave the way for the formation of OEEC (Organisation of European Economic Cooperation)?	2
14.	Why were developing countries exempted from the requirement of the Kyoto Protocol?	2
15.	Identify the most important outcome of the Rio summit.	2
16.	Differentiate between the main objective of the First and the Second Five Year.	2
17.	List any two challenges faced by India during Lai Bahadur Shastri's Government.	2
18.	Describe any two major issues in the North Eastern States of India.	2
	SECTION – C (20 MARKS)	
19.	Explain any four causes of ethnic conflict in Sri Lanka,	4
20.	What is meant by globalization? Explain any three cultural consequences of globalization. **OR** Explain any four factors responsible for the development of globalization.	4
21.	Describe briefly any four problems faced in the process of partition of India.	4
22.	Examine the conditions responsible for the growth of Naxalite movement in India. Suggest ways and means to crush it. **OR** Analyze the circumstances responsible for the declaration of a state of emergency in India on 25th June, 1975.	4
23.	Briefly describe the story of Sikkim from the time of India's MMJ independence to its merger with India.	4
	SECTION – D (12 MARKS)	
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	ASEAN has focused on creating a Free Trade Area (FTA) for investment, labour and services. The US and China have already moved fast to negotiate FTAs with ASEAN.	
(i)	**When was ASEAN established?**	1
A	1965	
B	1967	
C	1962	
D	1971	
(ii)	**ASEAN is principally a/an _____ .**	1
A	Economic organization	
B	Social organization	
C	Political organisation	
D	Cultural organisation	
(iii)	**Mention the any two objectives of ASEAN Economic Community.**	2
25.	**In the given outline political map of India, four states have been marked as (A), (B), (C) and (D). Identify these on the basis of the information given below and write their correct names in your answer book along with their respective serial number of the information used and the concerned alphabets as per format that follows:** (i)The State to which the former Congress President K Kamraj belonged (ii) The State from where the phrase 'Aya Ram Gaya Ram' originated (iii) The State to which former Prime Minister Lal Bahadur Shastri belonged (iv) The State where the Congress Party did not get majority in 1967 assembly election	4

Sr. Number of the information used	Alphabet concerned	Name of State
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26.	**Study the Cartoon given below and answer the questions that follow:**	4
(i)	**What does this cartoon depict?**	
A	USA's influence on UN	
B	UN's influence on the world	
C	US Hegemony	
D	None of the above	
(ii)	**What have been the reasons for immense influence of US on UN?**	
A	USA's economic superiority	
B	UN's head quarter is in USA and USA's financial contribution to UN.	
C	USA's weapon capacity	
D	All of the above	
(iii)	**Why this cartoon is not relevant today?**	
A	Because all the countries have their powerful organizations.	
B	UN has become more powerful.	
C	Iraq and Afghanistan war has affected US economy.	
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(iv)	**How has US dominated the world?**	
A	By its trade and commerce	

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D	By its advancement in space research.	
	SECTION – E (24 MARKS)	
27	Examine any six characteristics of the Soviet system during 1971-1991. **OR** Examine any six factors that helped Soviet Union in becoming a superpower on the globe after the Second World War.	6
28	What is meant by global poverty? Suggest any two ways to reduce disparity between the poor and the rich at the global level. OR What could be the three broad meanings of Terrorism? What stand does India have on the issue of Terrorism?	6
29	India's foreign policy was built around the principles of peace and co-operation. But India fought three wars in a space of 10 years between 1962 and 1971. Would you say that this was a failure of the foreign policy? Or would you say that this was a result of international situation? Give reasons to support your answer. OR Give any three suitable arguments in favour of "India being a staunch supporter of the dicolonisation process and in firm opposition to racism".	6
30	Describe the major developments that have taken place in Indian Politics during the NDA III & IV. **OR** Which three major developments took place in Indian politics during the last decade of the 20th century? Describe.	6

केंद्रीय विद्यालय संगठन, अहमदाबाद संभाग

KENDRIYA VIDYALAYA SANGATHAN, AHMEDABAD REGION

द्वितीय प्री–बोर्ड परीक्षा – 2025-26

SECOND PRE-BOARD EXAMINATION- 2025-26

SUBJECT: POLITICAL SCIENCE (028) **Max. Marks: 80**

CLASS: XII **TIME: 3 Hours**

GENERAL INSTRUCTIONS:

1. The question paper consists of five sections (A, B, C, D and E) with 30 questions in total.
2. All questions are compulsory.
3. Question numbers 1-12 are multiple choice questions of one mark each.
4. Question numbers 13-18 are of 2 marks each. Answer to these questions should not exceed 50-60 words each.
5. Question numbers 19-23 are of 4 marks each. Answer to these questions should not exceed100-120 words each.
   There is an internal choice in two of the 4 marks questions.
6. Question 24-26 are passage, cartoon and map-based questions of 4 Marks each. Answer accordingly.
7. Question numbers 27-30 are of 6 marks each. Answer to these questions should not exceed170-180 words each.
8. There is an internal choice in 6 marks questions.

Q.NO		MARKS
	SECTION- A (12 MARKS)	
1.	**What is the significance of the SAARC organization in South Asia?**	1
A	It has successfully resolved all regional conflicts.	
B	It promotes economic cooperation and regional integration among South Asian countries.	
C	It focuses solely on military alliances in the region.	
D	It is primarily concerned with environmental issues.	
2.	**What is the full form of LTTE?**	1
A	Liberated Tigers of Tamil Eelam	
B	Liberation Tigers of Tamil Eelam	
C	Liberated Troops of Telugu Eelam	
D	Liberation Troops of Tamil Eelam	

3.	**In 2006, How many member states did the UN have?**	1
A	192	
B	196	
C	200	
D	195	
Directions (Q No. 4 and 5) In the questions given below there are two statements marked as Assertion (A) and Reason (R). Read these statements and Choose the correct option. **Codes** 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.		
4.	**Assertion (A):** The UN is not a great balance to the US. **Reason(R):** The UN can and has served to bring the US and the rest of the world into discussions over various issues	1
5	**Assertion (A):** Sustainable development is necessary for the survival of future generations. **Reason (R):** Sustainable development means using resources for present needs without compromising future needs.	1
6.	**Which of the following statements about the environment are correct?** **(**i) Environmental concerns are part of the global politics. (ii) A conference on the environment was held in Rio-de-Janeiro in 1992. (iii) The UN has assigned the environmental programmers to the UN Human Rights Commission. (iv) The Earth Summit was organized by the United Nations. Choose the correct option.	1
A	(i), (iii), (iv)	
B	(i). (ii) and (iv)	
C	(i), (ii), (iii)	
D	(ii), (iii), (iv)	
7.	**Which of the following are the consequences of India's Partition in 1947?** (i) Communal violence (ii) Lakhs of people had to migrate from one place to another (iii) Parliamentary system of governance. (iv) Reorganisation of State	1

A	(i) and (iii)	
B	(ii) and (iv)	
C	(i) and (ii)	
D	(iii) and (iv)	
8.	Name the original state from which Chhattisgarh was carved out.	1
A	Uttar Pradesh	
B	Bihar	
C	Jharkhand	
D	Madhya Pradesh	
9.	**Which of the following statements about the Grand Alliance of 1971 is correct? The Grand Alliance _____**	1
A	was formed by all non-Congress parties	
B	had a clean political and ideological programme	
C	was formed by non-Communist non-Congress parties	
D	was formed by Communist non-Congress parties	
10.	**The term "Aya Ram, Gaya Ram" is associated with :**	1
A	Politics of Defection	
B	Decentralization	
C	Corruption	
D	Green Revolution	
11.	**Identify the Prime Minister of India from amongst the following who headed the first Coalition Government in India**	1
A	Atal Bihari Vajpayee	
B	V.P. Singh	
C	Morarji Desai	
D	H.D. Deve Gowda	
12.	**Which Political event in India marked a significant shift towards the "Growing Consensus" after 1990?**	1
A	Introduction of economic liberalization reforms	

B	Passage of the Right to Information Act	
C	Implementation of reservation policies for marginalized communities	
D	Ratification of international human rights conventions	
	SECTION – B (12 Marks)	
13.	What was the Marshall Plan? How did it pave the way for the formation of OEEC (Organisation of European Economic Cooperation)?	2
14.	Why were developing countries exempted from the requirement of the Kyoto Protocol?	2
15.	Identify the most important outcome of the Rio summit.	2
16.	Differentiate between the main objective of the First and the Second Five Year.	2
17.	List any two challenges faced by India during Lai Bahadur Shastri's Government.	2
18.	Describe any two major issues in the North Eastern States of India.	2
	SECTION – C (20 MARKS)	
19.	Explain any four causes of ethnic conflict in Sri Lanka,	4
20.	What is meant by globalization? Explain any three cultural consequences of globalization. **OR** Explain any four factors responsible for the development of globalization.	4
21.	Describe briefly any four problems faced in the process of partition of India.	4
22.	Examine the conditions responsible for the growth of Naxalite movement in India. Suggest ways and means to crush it. **OR** Analyze the circumstances responsible for the declaration of a state of emergency in India on 25th June, 1975.	4
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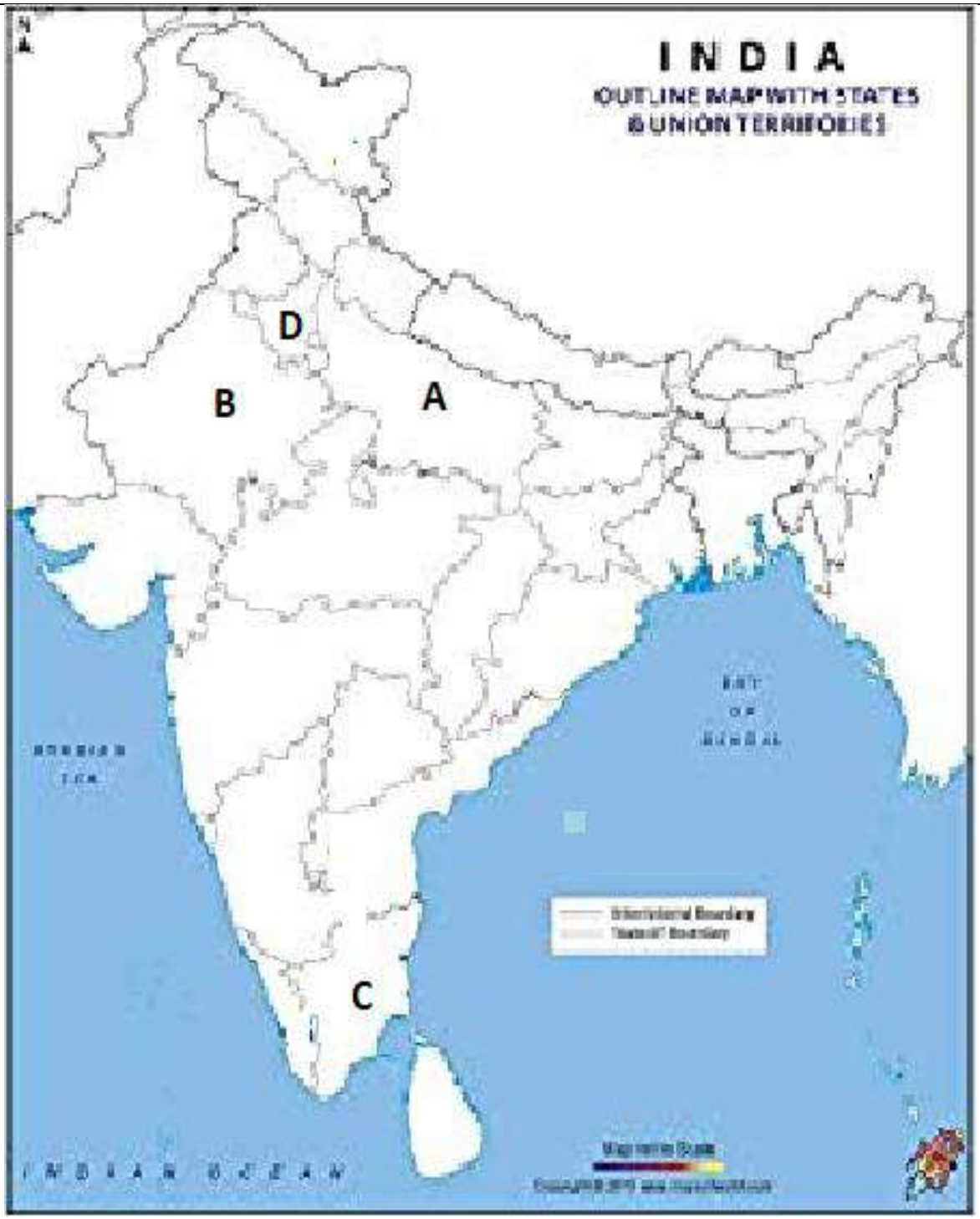

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