D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-25

CLASS : XII   **MAXIMUM MARKS : 70**

SUBJECT : CHEMISTRY   **TIME : 3 HOURS**

General Instructions :

Read the following instructions carefully.

(a) There are 33 questions in this question paper with internal choice.

(b) SECTION A consists of 16 multiple-choice questions carrying 1 mark each.

(c) SECTION B consists of 5 short answer questions carrying 2 marks each.

(d) SECTION C consists of 7 short answer questions carrying 3 marks each.

(e) SECTION D consists of 2 case-based questions carrying 4 marks each.

(f) SECTION E consists of 3 long answer questions carrying 5 marks each.

(g) All questions are compulsory.

(h) Use of log tables and calculators is not allowed.

SECTION A

The following questions are multiple-choice questions with one correct answer. Each question carries 1 mark. There is no internal choice in the section.

1. P_A and P_B are the vapour pressures of pure liquid components A and B respectively of an ideal binary solution. If x_A represents the mole fraction of component A, the total pressure of the solution will be :   1

   a) $P_A + x_A (P_B - P_A)$ b) $P_A + x_A (P_A - P_B)$

   c) $P_B + x_A (P_B - P_A)$ d) $P_B + x_A (P_A - P_B)$

2. $\Lambda^0_m(H_2O)$ is equal to :   1

   a) $\Lambda^0_m(HCl) + \Lambda^0_m(NaOH) - \Lambda^0_m(NaCl)$

   b) $\Lambda^0_m(NaCl) + \Lambda^0_m(NaOH) - \Lambda^0_m(HCl)$

   c) $\Lambda^0_m(NaCl) + \Lambda^0_m(HCl) - \Lambda^0_m(NaOH)$

   d) $\Lambda^0_m(NaCl) + \Lambda^0_m(NaOH) + \Lambda^0_m(HCl)$

3. Two faradays of electricity are passed through a solution of $CuSO_4$. The mass of copper deposited at the cathode is : (Atomic mass of Cu = 63.5 g)   1

   a) 2 g   b) 127 g

   c) 0 g   d) 63.5 g

4. Consider the reaction, $2A + B \rightarrow$ products. When concentration of B alone was doubled, the half-life did not change. When the concentration of A alone was doubled, the rate increased by two times. The unit of rate constant for this reaction is: 1

   a) s^{-1} b) $L\ mol^{-1}\ s^{-1}$

   c) $mol\ s^{-1}$ d) $mol\ L^{-1}\ s^{-1}$

5. Which of the following statements is not correct about the order of a reaction?   1

   a) The order of a reaction can be a fractional number.

   b) Order of a reaction is experimentally determined quantity.

   c) The order of a reaction is always equal to the sum of the stoichiometric coefficients of reactants in the balanced chemical equation for a reaction.

   d) The order of a reaction is the sum of the powers of molar concentration of the reactants in the rate law expression.

6. For $N_2(g) + 3H_2(g) \longrightarrow 2NH_3(g) + 22KCal$, E_a for the reaction is 70KCal. Hence, the activation energy for $2NH_3(g) \longrightarrow N_2(g) + 3H_2(g)$ is: 1

   a) 92KCal   b) 70KCal

   c) 48KCal   d) 22Kcal

7   Identify the compound Y in the following reaction.   1

a)

b)

c)

d)
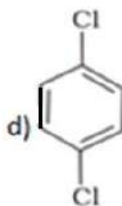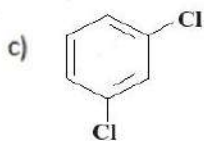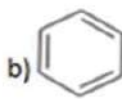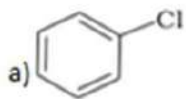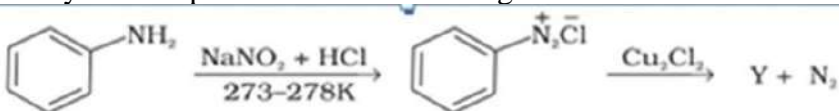
8   Which of the following is most acidic?   1
a) Benzyl alcohol
b) Cyclohexanol
c) Phenol
d) m-Chlorophenol

9   Phenol when it first reacts with concentrated sulphuric acid and then with concentrated nitric acid,   1
gives :
    a) nitrobenzene
    b) 2,4,6-trinitrophenol
    c) o- nitrophenol
    d) p- nitrophenol

10   Which of the following does not give benzoic acid while reacting with alkaline $KMnO_4$ followed   1
by acid catalysed hydrolysis?
a) $C_6H_5CH_3$ b) $C_6H_5CH(CH_3)_2$
c) $C_6H_5CH_2CH_3$ d) $C_6H_5C(CH_3)_3$

11   Ozonolysis of an organic compound 'A' produces acetone and propionaldehyde in equimolar   1
mixture. Identify 'A' from the following compounds :
a) 2-Methyl-2-pentene
b) 1-Pentene
c) 2-Methyl-1-pentene
d) 2-Pentene.

12   The reagent which does not react with both acetone and benzaldehyde is :   1
a) Sodium hydrogensulphite
b) Phenyl hydrazine
c) Fehling's solution
d) Hydrogen cyanide.

**In the following questions (Q.NO. 13 to 16) , a statement of Assertion(A) followed by a
statement of Reason(R) is given. Choose the correct answer out of the following choices :**
a) Assertion and reason both are correct statements and reason is correct explanation for assertion.
b) Assertion and reason both are correct statements but reason is not correct explanation for
assertion.
c) Assertion is correct statement but reason is wrong statement.
d) Assertion is wrong statement but reason is correct statement.

13 **Assertion (A) :** If red blood cells were removed from the body and placed in pure water, the pressure inside the cells increases.
    Reason (R) : The concentration of the salt content in the cells increases.
    a) Assertion and reason both are correct statements and reason is correct explanation for assertion.
    b) Assertion and reason both are correct statements but reason is not correct explanation for assertion.
    c) Assertion is correct statement but reason is wrong statement.
    d) Assertion is wrong statement but reason is correct statement.   1

14 **Assertion :** Trichloromethane is stored in closed dark coloured bottles completely filled so that air is kept out.
    Reason : It is slowly oxidised by air in the presence of light to an extremely poisonous gas, phosphine.
    a) Assertion and reason both are correct statements and reason is correct explanation for assertion.
    b) Assertion and reason both are correct statements but reason is not correct   explanation for assertion.
    c) Assertion is correct statement but reason is wrong statement.
    d) Assertion is wrong statement but reason is correct statement.   1

15 **Assertion:** Bromination of phenol takes place even in absence of Lewis acid.
    Reason: In phenol, -OH group attached to the benzene ring has highly deactivating effect.
    a) Assertion and reason both are correct statements and reason is correct explanation for assertion.
    b) Assertion and reason both are correct statements but reason is not correct   explanation for assertion.
    c) Assertion is correct statement but reason is wrong statement.
    d) Assertion is wrong statement but reason is correct statement.   1

16 **Assertion (A):** In Gattermann-Koch reaction, benzene is treated with CO+HCl in presence of anhydrous $AlCl_3$ and a small amount of CuCl to form benzaldehyde.
    Reason (R): In the above reaction formyl chloride is produced as an intermediate.
    a) Assertion and reason both are correct statements and reason is correct explanation for assertion.
    b) Assertion and reason both are correct statements but reason is not correct   explanation for assertion.
    c) Assertion is correct statement but reason is wrong statement.
    d) Assertion is wrong statement but reason is correct statement.   1

SECTION B

This section contains 5 questions with internal choice in one question. The following questions are very short answer type and carry 2 marks each.

17 Solutions of two electrolytes 'A' and 'B' are diluted. The Λ_m of 'B' increases 1.5 times while that of A increases 25 times. Which of the two is a strong electrolyte? Justify your answer.   2
                        OR
    a)What is the use of platinum foil in Standard Hydrogen Electrode?.
    b)How many electrons flow through a metallic wire if a current of 0.5A is passed for 2h?
                                                            (1F=96500 C/ mol)

18 Calculate the potential of hydrogen electrode in contact with a solution with pH equal to 10.   2

19 Nitric oxide NO, reacts with oxygen to produce nitrogen dioxide.   2
    $2NO(g)+O_2(g) \longrightarrow 2NO_2(g)$
    The rate law for this reaction is: Rate = $K^1[NO]^2[O_2]$
        Propose a mechanism for the reaction.

20 (a) The treatment of alkyl chlorides with aqueous KOH leads to the formation of alcohols but in presence of alcoholic KOH alkenes are major products. Explain.   2
    (b) Dipole moment of chlorobenzene is lower than that of cyclohexyl chloride. Explain why?

21 Monochlorination of propane in the presence of light gives two products. Identify the major and minor products and give reason.   2

SECTION C

This section contains 7 questions with internal choice in one question. The following questions are short answer type and carry 3 marks each.

22 3.9 g of benzoic acid dissolved in 49 g of benzene shows a depression in freezing point of 1.62 K . [K_f = 4.9 K kg/mol , Molar mass of benzoic acid = 122 g/mol]   3
(a) Calculate the van't Hoff factor .
(b) Predict whether it undergoes association or dissociation.

<div align="center">OR</div>

(a) An azeotropic mixture consisting of liquids A and B has a boiling point of 351.3K. The boiling points of pure A and B are 373K and 351.5K respectively. What type of deviation from Raoult's law does the mixture show?
(b) When 2 g of benzoic acid is dissolved in 25 g of benzene, the experimentally determined molar mass is always greater than the true value. Give reason.
(c) Explain the following phenomenon with the help of Henry's law –
Feeling of weakness and discomfort in breathing at high altitude.

23 Two elements A and B form compounds having molecular formula AB_2 and AB_4. When dissolved in 20 g of benzene, 1 g of AB_2 lowers the freezing point by 2.3 K whereas 1 g of AB_4 lowers it by 1.3 K. Molal depression constant for benzene is 5.1 K kg mol^{-1}. Calculate atomic masses of A and B.   3

24 Calculate $\Delta_r G^O$ and equilibrium constant , K_C for the following reaction at 298K.   3
$2Cr (s) + 3Cd^{2+}(aq.) \rightarrow 2Cr^{3+} (aq.) + 3Cd (s)$
[Given E^0_{cell} = +0.34 V, F=96500C mol^{-1} , antilog(34.5762) = 3.769 x 10^{34}.]

25 Give reason: 3
(a) The rate of a reaction increases with rise in temperature.
(b) In the redox titration of $KMnO_4$ vs oxalic acid, oxalic acid solution must be heated before starting the titration.
(c) Molecularity of any reaction can't be equal to zero.

26 Consider the decomposition of azoisopropane to hexane and nitrogen at 543 K :   3
$(CH_3)_2CHN=NCH(CH_3)_2 (g) \rightarrow N_2 (g) + C_6H_{14} (g)$
For the decomposition of azoisopropane to hexane and nitrogen at 543 K, the following data are obtained :

t (s)	0	360	720
P (mm of Hg)	35.0	54.0	63.0

Calculate the rate constant.
Given: log 2.1875=0.3399, log 5= 0.6989

27 (a) How the following conversion can be carried out ?   3
    Methanol to ethanol.
(b) What happens when phenol is treated with carbon tetrachloride and aqueous sodium hydroxide at 340 K followed by its acid hydrolysis ? Write the required chemical equation for the reaction.
(c) How will you prepare tert-Butyl ethyl ether by Williamson's synthesis?

28 (a)Write all the possible products obtained when a mixture of ethanal and propanal are treated with NaOH.   3
 (b)Why is it necessary to control the pH during the reaction of aldehydes and ketones with ammonia derivatives?

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 The solubility of gases increases with increase of pressure. William Henry made a systematic investigation of the solubility of a gas in a liquid. According to Henry's law "the mass of a gas dissolved per unit volume of the solvent at constant temperature is directly proportional to the pressure of the gas in equilibrium with the solution". Dalton during the same period also concluded independently that the solubility of a gas in a liquid solution depends upon the partial pressure of the gas. If we use the mole fraction of gas in the solution as a measure of its solubility, then Henry's law can be modified as "the partial pressure of the gas in the vapour phase is directly proportional to the mole fraction of the gas in the solution."   4

Read the above passage and answer the following questions:

(a) What is the relation of K_H with temperature?

(b) Write expression for Henry's law.

(c) Calculate solubility of methane in benzene at 298 K under 760 mm Hg. (Given Henry's constant = 4.27×10^5 mm Hg)

OR

(c) H_2S, a toxic gas with rotten egg like smell, is used for the qualitative analysis. If the solubility of H_2S in water at S.T.P. is 0.195 m ; calculate Henry's law constant. [Given, partial pressure of H_2S at S.T.P. is 0.987 bar]

30 Alcohols are classified into three types i.e., primary, secondary and tertiary depending upon the nature of the carbon atom to which alcoholic group is attached. These have common physical as well as chemical characteristics. However, they differ in their relative reactivities towards different reagent. The popular tests which can distinguish the three types of alcohols are Victor Meyer test and Lucas reagent test.   4

(a) Why are alcohols weakly acidic in nature?

(b) What is Lucas reagent?

(c) What is the correct order of reactivity of the different alcohols involving the cleavage of C–OH bond? Explain the reason for this order.

OR

(c) How can you distinguish primary, secondary and tertiary alcohols by Lucas test? Give suitable chemical equation in support of your answer.

SECTION E

The following questions are long answer type and carry 5 marks each. All questions have an internal choice.

31 (a) State Kohlrausch's law for the independent migration of ions. Mention any two applications of the law.   5

(b) A solution of $Ni(NO_3)_2$ is electrolysed between platinum electrodes using a current of 5.0 ampere for 20 minutes. What weight of Ni will be produced at the cathode? [Given, atomic mass of Ni = 58.7 g/mol]

(c) Given that the standard electrode potentials (E^0) of metals are :
   $E^0 (K^+/K) = -2.93$ V, $E^0 (Ag^+/Ag)= 0.80$ V , $E^0 (Cu^{2+}/Cu) = 0.34$ V , $E^0(Mg^{2+}/Mg) = -2.37$ V, $E^0 (Cr^{3+}/Cr) = - 0.74$ V , $E^0 (Fe^{2+}/Fe) = - 0.44$ V.
   Arrange these metals in an increasing order of their reducing power.

OR

(a) The conductivity of 0.001 M acetic acid is 4×10^{-5} S/cm. Calculate the dissociation constant of acetic acid, if molar conductivity at infinite dilution for acetic acid is 390 S cm^2/mol.

(b) What type of cell is lead acid storage cell? Write the anode, cathode reactions and the overall reaction occurring in a lead acid storage battery.

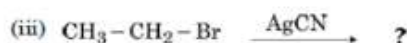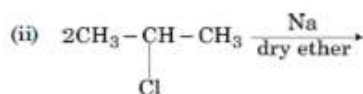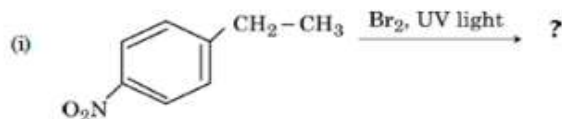32   (a) What happens when :   5

(i) Chlorobenzene is treated with Cl_2 / $FeCl_3$.

(ii) Ethyl chloride is treated with $AgNO_2$.

(iii) 2-bromopentane is treated with alcoholic KOH?

(b) Account for the following:

(i) Benzyl chloride is highly reactive towards S_N1 reaction.

(ii) Racemic mixture is optically inactive.

OR

(a) Write the major products of the followings:

(i)

$CH_2-CH_3 \xrightarrow{Br_2, \text{ UV light}} ?$

(ii) $2CH_3-\underset{\underset{Cl}{|}}{CH}-CH_3 \xrightarrow[\text{dry ether}]{Na}$

(iii) $CH_3-CH_2-Br \xrightarrow{AgCN} ?$

(b) Compound 'A' with molecular formula C_4H_9Br is treated with aq. KOH solution. The rate of this reaction depends upon the concentration of the compound 'A' only. When another optically active isomer 'B' of this compound was treated with aq. KOH solution, the rate of reaction was found to be dependent on concentration of compound and KOH both.

(i) Write down the structural formula of both compounds 'A' and 'B'.

(ii) Out of these two compounds, which one will be converted to the product with inverted configuration ?

33   (a) Write chemical equations to illustrate the following name bearing reactions: 5

(i) Cannizzaro reaction

(ii) Hell-Volhard-Zelinsky reaction

(b) Give chemical tests to distinguish between the following pairs of compounds:

(i) Propanal and Propanone

(ii) Acetophenone and Benzophenone

(iii) Phenol and Benzoic acid

OR

(a) Arrange the following compounds in the increasing order of their property as mentioned :

(i) CH_3CHO , CH_3CH_2OH , CH_3OCH_3 , $CH_3CH_2CH_3$ (Boiling points)

(ii)   Ethanal, propanal, propanone, butanone. (Reactivity towards nucleophilic addition reactions)

(b) (i) How will you convert ethanal to But-2-enoic acid.

    (ii) Write the chemical equation involved in Rosenmund reduction.

    (iii) Give simple chemical test to distinguish between ethanal and propanal.

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CLASS – XII   **MAX. MARKS -70**
SUBJECT – ENTREPRENEURSHIP   **TIME – 3 HOURS**

General Instructions:
1. This question paper contains 34 questions.
2. The question paper contains 4 sections - A, B, C and D
 1.1. Section A contains multiple choice questions
 1.2. Section B - 2 marks; Answers to these questions may be from 30-40 words.
 1.3. Section C - 3 marks; Answers to these questions may be from50-75 words.
 1.4. Section D - 5 marks; Answers to these questions may be from120-150
3. Internal choice is given in the paper, there is no overall choice.

Part A

1. Akash is a budding entrepreneur. He is always in touch with the changes in the external   1
    environment which helps him to identify opportunities and find strategies to capitalise on the
    opportunities at the earliest. Sensing the growing demand for fine furniture, he started the first
    online furniture mart, which helped him to capture more than 80% of the market share in
    a short span. This is an example of:
    A. Tapping useful resource
    B. Image building
    C. Formulation of strategies and policies
    D. First mover advantage

2. Amit came up with an idea of producing wall cladding tiles, apartment walkways and swimming   1
    pools using shredded plastic. He went through the process of studying the pros and cons of
    manufacturing. The stage of creative process discussed above is:
    A. Germination
    B. Preparation
    C. Incubation
    D. Illumination

3. British Airways is planning to expand its operation in other countries but as airline revenues are 1
    very sensitive to business traffic before the investment company wants to closely examine and
    prepare a comparative report on the prevailing oil prices, exchange rates, taxation (for example,
    VAT on fuel) in different countries.
    The company therefore is trying to consider_____ factor of Business environment.
    A. Ecological
    B. Economic
    C. Technological
    D. Social

4. Mallika was selling vegetables in her cart along with her mother. They were able to earn a profit of 1
    around Rs.200 every day. Even though the amount was not substantial it was sufficient for a decent
    living. Mallika often noticed that nuclear families where both husband and wife go to work find it
    difficult to cook as cleaning and cutting vegetables took a lot of time, so an entrepreneur she started
    gathering information regularly and developed a new product line of selling cut vegetables in
    hygienic packaging. Mallika used_____ trend to spot this idea.
    A. Talk trends
    B. Read trends
    C. Watch trends
    D. Think trends

5. In the drive to make the world 'plastic free', Aru designed a machine to convert single use   1
    plastics into very small granules that could be used for making low-cost roads. Her machine
    worked with the help of solar energy. She decided to put her idea before the venture capitalist in a
    format of pitch deck with oral narrative.
    From the option below choose the most correct/suitable statement that describes the format used
    by Aru.
    A. an entertaining slide show of the executive summary and a few key graphs showing financial
        trends.
    B. three-minute summary of the business plan's executive summary.
    C. well written, and pleasingly formatted plan targeted at external stakeholders.
    D. a detailed plan describing planning details that are needed by management.

6. Hemant approached his father seeking Rs.5, 00,000 for his new venture. He had planned to start a   1
    computer assembling unit. Though his father was in a position to give him the money he still
    insisted that he should take a loan from the bank which will make him more responsible. When
    Hemant approached the bankers, they asked for a business plan. Hemant was not sure as to who
    can help him in preparation of the business plan. Who among the following can prepare the
    business plan?
    A. Lawyers
    B. Accountants
    C. Marketing consultants
    D. All of the above

7. **From the following identify the statement(s) most appropriate or relevant to a 'Pvt. Ltd.'**   1

    (I) has a minimum of two and a maximum of forty members excluding its past and present
    employees.
    (II) prohibits an invitation to the public to subscribe for any shares or debentures of the company.
    (III) has a minimum paid up capital of five lakh rupees.
    (IV) restricts the right of its members to transfer shares.
    A. (I) and (III).
    B. (II), (III) and (IV)
    C. (II) and (IV).
    D. All of the above are relevant

8. Rajiv while working on the financial plan for his business realised that his financial requirements 1
    will be for fixed assets and their installations, preliminary expenses, working capital, expenses on
    research and development, investment in short term assets viz. raw materials etc. To decide the
    sources of funds he tried to ensure the selection of best overall mix of financing for his enterprise.
    Identify the element/s of financial plan discussed here:
    A. Proforma investment decisions.
    B. Proforma financing decisions.
    C. Both (a) and (b).
    D. Neither (a) nor(b).

9. The electronics company LG introduced a new type of screen that is flexible enough to roll up   1
    like a newspaper. LG wants to exclude other manufacturers from making, using, selling and
    importing an invention for a limited period of time. The intellectual property right that LG has to
    acquire is:
    A. Copyright
    B. Patent
    C. Industrial Design
    D. Trademark

10. **Identify the correct sequence of alternatives given in Column II by matching them with respective terms in Column I:**   1

Column – I	Column – II
a) if the number of buyers is less.	(i) Short/direct channel of distribution.
b) Selling such an item or product which is of highly perishable in nature.	(ii) long or indirect distribution channel
c) Selling products for which cost is pre-determined and there is no scope for alteration.	(iii) Short/direct channel of distribution

   A. i, iii, ii
   B. ii, i, iii
   C. iii, ii, i
   D. i, ii, iii

11. 'Girl' of Amul, 'Maharaja' of Air India, 'Ronald' of McDonald etc. are example of: -   1
    A. Brand name.
    B. Logotype
    C. Brand mark.
    D. None of these.

12.   1

    Identify the promotion strategy shown in the image above.
    A. Below-the line
    B. Above -the-line
    C. Through-the-line
    D. Both Below-the-line and Above-the-line

13. Identify from the options given below the component of franchise agreement that provides   1
    guidelines on how to use the company's (franchisor) name or banner, procedures of marketing
    and advertising to be followed by franchisee and contribution to be made by franchisee in
    national advertising effort of the company.
    A. Operations Manual.
    B. Proprietary Statements.
    C. Contract Explanation.
    D. On-going Site Maintenance.

14. The rule of thumb is that one should only expand when there are_____ that can benefit   1
    the business.
    A. Tapped Opportunities.
    B. Untapped Opportunities.
    C. Challenging Opportunities.
    D. Initial Opportunities.

15. **"Where a company comes from is less important than where it is going, as boundaries are erased, corporate birth certificate won't count much."** 1
    The above statement in respect significance of growth and development of firm is given by:
    A. Ron Sommer, former president, Sony Corporation of India.
    B. Ray Kroc the founder of McDonald's.
    C. Anirudh Deshmukh, President, Raymond Ltd.
    D. Vicent Niagra, an owner of three Window.

16. In the following question, the Assertion (A) and Reason (R) have been put forward. Read both the 1
    statements carefully and choose the correct alternative from the following:
    Assertion: In a partnership firm every partner is principal as well as agent of other partners and of the firm.
    Reason: The business of partnership can be carried on by all the partners or any one of them acting for all.
    A. Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
    B. The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
    C. Assertion is true but the Reason is false.
    D. Both the statements are false

17. In the following question, the Assertion (A) and Reason (R) have been put forward. Read both the 1
    statements carefully and choose the correct alternative from the following:
    Assertion: Franchising model of business can be a great beginning for start-ups.
    Reason: The start-ups can grow fast without having to increase labour, operating costs and blocking running expenses because normally buyers straight walk up to them.
    A. Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
    B. The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
    C. Assertion is true but the Reason is false.
    D. Both the statements are false

18. In the following question, the Assertion (A) and Reason (R) have been put forward. Read both the 1
    statements carefully and choose the correct alternative from the following:
    Assertion: An entrepreneur should be very careful in deciding/in choosing its brand strategy.
    Reason: The whole meaning and direction of a company can be explained through its brand management strategy.
    A. Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
    B. The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
    C. Assertion is true but the Reason is false.
    D. Both the statements are false.

Part B

19. XYZ company decided to use mass media for promotion like----placing banner on billboards to be displayed beside highway, contracting media houses or theatre house for running through the advertisement in between interval, advertisement through newspaper etc.
Which particular approach of promotion is referred here? Name the other two approaches also.   2

Or,

'ABC India Ltd.' is the manufacturers of RO- water purifiers. The company has developed a new water purifier that not only converts the hard water into soft water but also kills the bacteria and other harmful microorganisms present in it. The company has named this water purifier as 'Sudha Paani' and for its marketing, appointed salesmen throughout the country. The company also trained the salesmen to provide information about the usefulness of the water purifiers to the customers and motivate them to buy the same.
(a) Name the 'type of promotion strategy' adopted by the company.
(b) Also identify and give meaning of the channel of distribution used by the company.

20. Define the term Brand. What are its three components.   2

21. Harshit runs a textile mill. The company is into converting cotton yarn into fabric and then further printing on the same to add value to the fabric. He wants to plan the work in such a manner that production process does not stop. His main focus is on machinery, equipment requirement, raw materials and plant layout.
So, what part of Business Plan he needs to be more serious about? Sate its two objectives.   2

Or,

"Picturising ahead every step in a long series of separate operations, each step to be taken in the right place of the right degree, and at the right time and each operation to be done at maximum efficiency", quoted Alford and Beathy.
Which component of Business plan is reflected in the above quote? Also name the three situations that determine the magnitude of importance and disclosure required under the production plan.

22. Historically, it appears that business first started with this form of organization. One of the oldest, simplest and most commonly used forms of business organization.
Which form of business organization is talked about here? State its any two features.   2

23. State meaning of the following terms.   2
Franchising, Franchisor and Franchisee.

24. How is franchising a better option for external expansion in case of start-ups?   2
Or,
State and explain in brief the two Advantages of franchising to the franchisor.

Part C

25. Ronit Kumar started leather jacket business with his brother. Both were very excited about the new venture. With meticulous planning and a lot of hard work they were able to sell 700 units of jackets in the first year. But they did not earn any profit. Both were happy because they were not at loss and revenue generated was equal to the cost. Now they were moving towards earning profit in the second year.
Identify the component of financial plan discussed above and state its significance.   3

26. Enlist any three points of importance in framing the business plan.   3
Or,
State the factors that affect the number of people required for various positions throughout the enterprise.

27. **While it is not compulsory to register your partnership firm as there are no penalties for non- registration but it is advisable.** 3

    In the light of the given statement state the rights that are denied to an unregistered partnership firm.

28. Before you dive head first into your franchise business opportunity search, it's important that you understand the different types of franchising opportunities available to you. 3

    Thus, explain any three such type of opportunities.

    Or,

    What is a franchise agreement? Also, explain the following elements of a franchise agreement:
    a) Proprietary Statements.
    b) Ongoing Site Maintenance.

29. What is environment scanning? Sate any four sources where from information for environmental scanning can be collected. 3

    Part D

30. What do you mean by Sensing entrepreneurial opportunities? Also, explain the various factors involved in sensing opportunities? 5

    Or,

    Name the various factors involved in assessing the market while selecting a product or service and explain any three.

31. Krishna started his factory for manufacturing plastic items in Daman. As per the advice of his manager, he appointed a consultancy company to formulate a business plan for his manufacturing unit. The company in its business plan mentioned the need of installing a water waste treatment plant within the premises of the manufacturing unit. 5

    Interpret any five socio-economic benefits expected to acquire from the proposed investment.

32. Tina has a degree in robotics and she loves to design products. She started her career in a famous Robotic company of U.S.A which uses high end technology in all their products. Her job profile included travelling a lot also. Whenever she travelled, she noticed that disabled people have difficulty moving their wheelchair from one place to another because in some places ramp is not provided and there is no way they can walk up the stairs. She came up with an idea of a wheelchair which can be used on stairs easily. She decided to quit her job and start her own company. 5

    She realized that her idea was the first stage in the process of innovation. Identify the concept and explain the first four steps in this process.

33. Briefly explain the considerations related to market that an entrepreneur has to keep in mind while choosing a suitable channel of distribution for his/her product. 5

    Or,

    What are Intellectual property (IP) rights? Explain four common types of intellectual property rights.

34. Atharav, a small entrepreneur, is manufacturing portable electric iron for domestic use with the brand name 'P-IRON'. This iron is in great demand. He finds that the cost of production per unit of iron is 1,000 and he can sell the same at 1,200 per unit. The competitors in the market are selling this type of iron at the rate of 2,000. Atharav's objective is not to earn profit in the short-run but to capture the largest market. His expectation is that the customers will be attracted towards the new brand because of low price. 5

    Identify the method of pricing adopted by Atharav's to capture the substantial portion of the market. Also state any four advantages of this method of pricing.

    ****

CLASS: XII   **MAXIMUM MARKS: 80**
SUBJECT: ACCOUNTANCY (055)   **TIME: 3 HOURS**

General instructions:
- There are **34** questions in all. All questions are compulsory.
- This question paper contains **10** printed pages.
- Q.N. 0**1 to 20** are very short answer type questions carrying **1** mark each.
- Q.N. **21 to 26** are short answer **type – I** questions carrying **3** marks each.
- Q.N. **27 to 29** are short answer **type – II** questions carrying **4** marks each.
- Q.N. **30 to 34** are long type answer questions carrying **6** marks each.
- There is no overall choice. However, an internal choice has been provided in **6** questions of one mark, **2** questions of three marks, **1** question of four marks and **2** questions of six marks.

1. Which of the following statements are correct: 1
   (i). The liability of a partner for acts of the firm is unlimited.
   (ii). Private assets of a partner can also be used for paying the debts of the firm.
   (iii). Each partner is liable jointly with all other partners and also severally to the third parties for all the acts of the firm done, while he is a partner.
   (iv). The liability of a partner is limited to the extent of his capital contribution.
   A. Only (iii)   B. (i) and (ii)
   C. (i), (ii) and (iii)   D. (i), (ii), (iii) and (iv)

2. Calculate the interest on drawings of Mr. A @10% p.a. for the year ended 31st March, 2023 if   1
   he withdrew ₹5,000 per month at the end of every month.
   A. ₹ 3,250   B. ₹ 3,000
   C. ₹ 2,750   D. ₹ 6,000

   OR

   In the absence of agreement, partners are not entitled to:
   A. Salary
   B. Commission
   C. Equal share in profit
   D. Both (a) and (b)

3. **Assertion (A):-** Interest on Capital provided to partner is shown in Profit and Loss   1
   Appropriation Account.
   Reason (R):- Interest on Capital provided to partner is charge against profits and is to be provided at fixed rate:
   A. Assertion (A) is correct but Reason (R) is incorrect
   B. Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of Assertion (A)
   C. Both Assertion (A) and Reason (R) are incorrect.
   D. Both Assertion (A) and Reason (R) are correct, and Reason (R) is the correct explanation of Assertion (A)

4. Investment fluctuation Reserve is a reserve set aside out of profit to adjust the difference   1
   between _____(i)_____and _____(ii)_____ of investment.
   A. (i) Book Value, (ii) Market Value   B. (i) Realisable Value, (ii) Market Value
   C. (i) Book Value, (ii) Depreciated Value   D. (i) Intrinsic Value (ii) Replacement Value

5　Any change in the relationship of existing partners which results in an end of the existing agreement and entering into a new agreement is called:　1
A. Revaluation of Partnership Firm　　　B. Reconstitution of Partnership Firm
C. Dissolution of Partnership Firm　　　D. Amalgamation of a Partnership Firm

<center>**OR**</center>

Revaluation of assets at the time of reconstitution is necessary because their present value may be different from their:
A. Market Value　　　　　　　　　　B. Net value
C. Cost of the Asset　　　　　　　　　D. Book Value

6.　Anubhav, Sagun and Pulkit are partners in a firm sharing profits and losses in the ratio of 2 : 2 : 1. On 1st April 2022, they decided to change their profit sharing ratio into 5 : 3 : 2. On the that date, debit balance of Profit & Loss A/c ₹30,000 appeared in the balance sheet and instead of closing the Profit & Loss A/c partners decided to pass an adjustment entry for it.　1

Which of the under mentioned option reflect correct treatment for the above treatment?

A. Shagun's Capital account will be debited by ₹3,000 and Anubhav's Capital Account will be credited by ₹3,000

B. Pulkit's Capital account will be credited by ₹3,000 and Shagun's Capital Account will be credited by ₹3,000

C. Shagun's Capital account will be debited by ₹30,000 and Anubhav's Capital Account will be credited by ₹30,000

D. Shagun's Capital account will be debited by ₹3,000 and Anubhav's and Pulkit Capital Account will be credited by ₹2,000 and ₹1000 respectively.

7.　On the 1st April, 2024 partners' capital accounts showed a balance of ₹7,00,000 while the general reserve amounted to ₹1,00,000. If the normal rate of return is 15% and the goodwill of the firm is valued at ₹1,60,000 at 4 year's purchase of super profit, find the average profit of the firm.　1
A. ₹1,45,000　　　　　　　　　　　B. ₹1,30,000
C. ₹1,60,000　　　　　　　　　　　D. ₹80,000

8.　Under what circumstances will the premium for Goodwill paid by the incoming partner not to be recorded in the books of accounts?　1
A. When one partner is gainer
B. When only one partner is sacrificing
C. When new partner does not bring his share of Goodwill in cash
D. When new partner pays his share of Goodwill privately

9.　A and B are partners in a firm sharing profits in the ratio of 3:2. C was admitted with 1/6th share in the profits of the firm. At the time of admission Workmen's Compensation Reserve appeared in the Balance Sheet of the firm at Rs 32,000. The claim on account of Workmen's Compensation was determined at Rs 40,000. Excess claim over the reserve will be :　1
A. Credited to Revaluation A/C　　　B. Debited to Revaluation A/C
C. Credited to old partners Capital A/C　　D. Debited to old partners Capital A/C

<center>**OR**</center>

Ravi and Gourav are partner in a firm. They want to admit Dhruv for 1/4th share in profit. For this, they revalued their machinery from ₹30,000 to ₹40,000 and creditors from ₹1,10,000 to ₹1,00,000. What journal entry will be passed:

A. Machinery A/c …………….…… Dr.
　Creditors A/c ……………..…...…Dr.
　　To Revaluation A/c

B. Machinery A/c ………………….. Dr.
　Revaluation A/c …………………..Dr
　　To Creditors A/c

C. Machinery A/c ……………………Dr.

    To Revaluation A/c

    To Creditors A/c

D. Creditors A/c ……………………….Dr.

    To Machinery A/c

    To Revaluation A/c

10. **Match the following Column - I with Column - II**   1

	Column - I		Column – II
a.	Revaluation Account	(i)	Loss
b.	Decrease in Provision for Doubtful Debts	(ii)	Nominal Account
c.	Goodwill Account	(iii)	Gain
d.	Increase in Liabilities	(iv)	Real Account

A. a - (iii), b - (iv), c - (i), d - (ii)   B. a - (ii), b - (iii), c - (iv), d - (i)

C. a - (i), b - (ii), c - (iii), d - (iv)   D. a - (iv), b - (ii), c - (i), d - (iii)

11. Amay, Bina and Chander are partners in a firm with capital balances of ₹ 50,000, ₹ 70,000 and ₹80,000 respectively on 31st March, 2023. Amay decides to retire from the firm on 31st March, 2023. With the help of the information provided, calculate the amount to be paid to Amay on his retirement. There existed a general reserve of ₹ 7,500 in the balance sheet on that date. The goodwill of the firm was valued at ₹ 30,000. Gain on revaluation was ₹24,000   1

A. ₹88,500   B. ₹90,500

C. ₹65,375   D ₹70,500

12. In the case of retirement, if full or part of the amount payable to the retiring partner still remains to be paid, and there is no agreement among the partners then retiring partner will get: 1

i. Interest @ 6% p.a. on the Balance amount.

ii. Share of profit earned proportionate to his amount outstanding to total capital of the firm.

iii. Interest @ 9% p.a on the balance amount.

A. (i)   B. (ii)

C. (iii)   D. Have a choice to get either (i) or (ii)

13. X, Y and Z sharing profits in the ratio of 5 : 3 : 2. On 1st April 2023 Y decided to retire from the firm and his share taken by X and Z in the ratio of 5 : 2. On the date of retirement an old computer which was previously written off was sold for 2000 as scrap. Y's Capital A/c will be: 1

A. ₹600 Debit   B. ₹600 Credit

C. ₹1000 Debit   D. ₹1000 Credit

OR

Amount credited to a retiring partner in his Capital Account is ₹2,01,000. He took investments at ₹58,000. He also took 20% of the debtors. The amount transferred to his loan account is ₹1,23,000 What is the total value of the debtors?

A. ₹1,00,000   B. ₹90,000

C. ₹80,000   D. ₹1,10,000

14. A, B and C are partners. C expired on 18th December 2021 and as per agreement, surviving partners A and B directed the accountant to prepare financial statements as on 18th December 2021 and accordingly the share of profits of C (deceased partner) was calculated as ₹ 12,00,000. Which account will be debited to transfer C's share of profits: 1

A. Profit and Loss Suspense Account   B. Profit and loss Appropriation Account

C. Profit and loss Account   D. None of the above

OR

On the death of a partner, the amount due to him will be credited to:

A. All Partner's Capital Accounts   B. Remaining Partner's Capital Accounts

C. His Executor's Account   D. Governments' Revenue Account

15. A, B and C were the partners in a firm sharing profits and losses in the ratio of 2 : 2 : 1. B   1
died on 1st August 2022. On death of B, share of profit up to his date of death on the basis of
sales till date of death. Sales for the year ended 31st March, 2022 was ₹4,00,000 and profit for
the same year was ₹80,000. Sales shows a growth trend of 25% and percentage of profit
earning is increased by 4%. Calculate the B's share of profit –

A. ₹25,000   B. ₹20,000

C. ₹16,000   D. ₹18,000

16. Given below are two statements, one labelled as Assertion (A) and the other labelled as   1
Reason (R):

Assertion (A): On dissolution, 'Loan by firm to a Partner' is not transferred to Partner's
Capital Account but is recovered from him.

Reason (R): Such a loan an assets of the firm and hence this amount is recovered from the
partner so that it is utilised to make payment of third party liabilities of the firm.

In the context of above two statements, the correct option is:

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

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

C. (A) is correct but (R) is wrong.

D. Both (A) and (R) are incorrect.

17. At the time of dissolution of a firm, firm's total assets were ₹5,00,000, creditors were   1
₹1,00,000. Realisation expenses amounted to ₹10,000. Assets realised 20% more than
the book value and creditors were paid 5% less. Gain/loss on realisation will be

A. Gain = ₹4,95,000   B. Loss = ₹75,000

C. Gain = ₹95,000   D. Loss = ₹1,00,000

OR

In the Balance sheet, Debtors exist at ₹50,000 and provision for doubtful debts at
₹1,500. How much amount will be realised from Debtors. If bad debts are ₹10,000
and remaining debtors are realised at a discount of 5%?

A. ₹38,000   B. ₹36,500

C. ₹36,575   D. ₹39,500

18. Which of the following will be transferred to Realisation Account at the time of dissolution of   1
firm?

(i) Provision for doubtful debts   (ii) Partners' Loan

(iii) General Reserve   (iv) Goodwill

Select the correct option

A. (i) and (iv)   B. (i), (ii) and (iv)

C. (i), (iii) and (iv)   D. (i), (ii) and (iii)

19. The firm paid realisation expenses of ₹10,000 on behalf of Nihar, a partner with whom it was   1
agreed at ₹25,000. Realisation Account will be debited with

A. ₹10,000   B. ₹35,000

C. ₹25,000   D. ₹1,00,000

20. On dissolution of a firm, there was an Unrecorded asset of ₹ 2,000 which was taken over by a   1
partner at ₹ 2,500. The entry will be:

A. Partner's Capital A/C ---------------------- Dr.   ₹ 2,000

     To Realisation A/C   ₹ 2,000

B. Partner's Capital A/C ---------------------- Dr.   ₹ 2,500

     To Realisation A/C   ₹ 2,500

C. Bank A/C ----------------------------------- Dr. ₹ 2,500

    To Realisation A/C   ₹ 2,500

D. Realisation A/C --------------------------- Dr. ₹ 2000

    To Partner's Capital A/C   ₹ 2,000

21. P and Q were partners in a firm sharing profits in 3 : 1 ratio, their respective fixed capital **3** were ₹10,00,000 and ₹6,00,000. The partnership deed provided interest on capital @ 12% p.a. The partnership deed further provided that interest on capital will be allowed fully even if it will result into a loss to the firm. The net profit of the firm for the year ended 31st March, 2023 was ₹ 1,50,000

Pass necessary journal entries in the books of the firm allowing interest on capital and division of profit/ loss among the partners

22. Calculate goodwill of a firm on the basis of three years purchases of the Weighted Average **3** Profits of the last four years. The profits of the last four years were:

Years (ending 31st march)	2020	2021	2022	2023
Amount (₹)	28,000	27,000	46,900	53,810

a) On 1st April, 2020 a major plant repair was undertaken for ₹10,000 which was charged to revenue. The said sum is to be capitalized for goodwill calculation subject to adjustment of depreciation of 10% on reducing balance method.

b) For the purpose of calculating Goodwill the company decided that the years ending 31.03.2020 and 31.03.2021 be weighted as 1 each (being COVID affected) and for year ending 31.03.2022 and 31.03.2023 weights be taken as 2 and 3 respectively.

OR

Varun and Kuber are partners in a business. Balance in Capital and Current Account on 31st March, 2023 were:

	Capital Account	Current Account
Varun	₹5,00,000	₹80,000
Kuber	₹3,50,000	₹20,000 (Dr.)

Profits of the last five consecutive years ending 31st March were: 2019: ₹60,000; 2020: Loss ₹40,000; 2021: ₹1,30,000; 2022: ₹2,00,000 and 2023: ₹2,50,000

General Reserve appeared in the books at ₹50,000.

If the normal rate of return is 10%, find the value of goodwill by Capitalisation of Average Profit Method.

23. Archie and Charu are partners sharing profits in 2 : 1. Their balance sheet showed Machinery **3** at ₹4,00,000; Stock at ₹4,50,000; Debtors at ₹3,70,000 and Creditors at ₹2,20,000. They admit Poorvi as a partner and new profit sharing ratio is agreed at 4 : 3 : 3. It was agreed that:
   i   Stock is undervalued by 10%
   ii Debtors amounting ₹10,000 are irrecoverable and provision for doubtful debts be created @ 5%.
   iii Creditors are unrecorded to the extent of ₹30,000.

Arche's Share in loss on revaluation amounted to ₹32,000. Calculate the revalued value of machinery.

24. Prateek, charu and Sirima were partners in a firm sharing profits in the ratio of 3 : 2 : 1. **3** Prateek retired from the firm on 31st March, 2023. Charu and Sirima decided that the capital of the new firm will be ₹6,30,000 in their profit sharing Ratio. The capital account of Charu and Sirima after all adjustments on the date of retirement showed a credit balance of ₹4,35,000 and ₹1,89,000 respectively. Calculate the amount of actual cash to be brought in to the firm or to be paid to the partners. Also pass necessary journal entries

OR

A, B and C are partners in a firm sharing profits in the ratio of 2 : 3 : 4. On 31st March 2024, A retires and B and C decided to share future profits in the ratio of 2 : 1. Following balance appeared in their books on this date:

Particulars	Amount (₹)
Profit and Loss (Dr.)	72,000
Employee's Provident Fund	1,50,000
Workmen Compensation Reserve	45,000
General Reserve	1,20,000

It is agreed that (i) Workmen Compensation Reserve is no more required, and (ii) 25% of the General Reserve is to be transferred to Provision for Doubtful Debts.

Pass journal entries for the adjustment of these items on A's retirement.

25. A, B and C were partners in a firm sharing profits in 3:2:1 ratio. The firm closes its books on 31st March every year. B died on 12.6.2023. On B's death the goodwill of the firm was valued at ₹ 60,000. On B's death his share in the profits of the firm till the time of his death was to be calculated on the basis of previous year's profit which was ₹. 1,50,000. Calculate B's share in the profit of the firm. Pass necessary journal entries for the treatment of goodwill and B's share of profit at the time of his death.   3

26. Pass necessary journal entries on the dissolution of a partnership firm in the following cases: 3
   i   Joney, a partner, agreed to bear the dissolution expenses for a commission of ₹ 750. Actual dissolution expenses ₹ 650 were paid by Joney.
   ii Bony, a partner, agreed to look after dissolution work for a remuneration of ₹ 3,700. He also agreed to bear the dissolution expenses. Actual dissolution expenses ₹ 4,200 were paid by Bony from the firm's cash
   iii Sony, a partner, was appointed to look after the dissolution work for a remuneration of ₹ 10,000. Sony agreed to bear the dissolution expenses. Sony took away stock worth ₹10,000 as his remuneration. Stock had been transferred to realisation account

27. Mishra and Prisha were partners in a firm sharing profits and losses in the ratio of 3 : 2. On 1st April, 2022, their capital accounts showed balances of ₹50,000 and ₹30,000 respectively. During the year, Mishra withdrew ₹12,900 while Prisha withdrew ₹9,600. They were allowed on interest on capital @ 10% p.a. Interest on drawings of ₹660 was charged on Mishra's drawings and ₹540 on Prisha's drawings. Prisha had advanced a loan of ₹20,000 to the firm on 1st August, 2022. The net profit for the year ended 31st March, 2023 amounted to ₹22,600.   4

Prepare Profit and Loss Appropriation Account for the year ended 31st March, 2023

28. Following is the Balance Sheet of P, R and S who are sharing profits in 2:1:2 as at March 31, 2023:   4

Liabilities		Amount (₹)	Assets	Amount (₹)
Capital:			Goodwill	80,000
P	2,40,000		Land & Building	4,00,000
R	1,60,000		Stock	1,30,000
S	2,00,000	6,00,000	Debtors	60,000
Profit and Loss Account		1,20,000	Cash at Bank	1,30,000
Employee Provident Fund		4,000		
Creditors		76,000		
		8,00,000		8,00,000

P died on June 12, 2023. According to the partnership deed, the executors are entitled to:

(a) Her capital as per Balance Sheet.

(b) Interest on capital @ 8% p.a. upto the date of death.

(c) Her share of profit upto the date of death on the basis of average profits for the past 3 years.

(d) Her share of goodwill valued on the basis of two times the average profits of the last 3 years.

Profits for the last three years were ₹60,000; ₹1,40,000; and ₹1,60,000 respective. R and S acquired P's Share in the ratio of 1 : 5

Prepare P's Capital Account to be rendered to her executor's.

OR

Akul, Bakul and Chandan were partner's in a firm sharing profits in the ratio of 7:2:1. Balance Sheet of the firm as on 31st March, 2023 was as follows:

Liabilities		Amount (₹)	Assets	Amount (₹)
Capital:			Goodwill	40,000
Akul	70,000		Land Building	60,000
Bakul	20,000		Machinery	40,000
Chandan	10,000	1,00,000	Stock	7,000
General Reserve		20,000	Debtors	12,000
Loan from Bakul		30,000	Cash	5,000
Creditors		14,000		
		1,64,000		1,64,000

Bakul died on 24th August, 2023, partnership Deed provides for the settlement of claim on the death of a partner in addition to his capital as under:

(i) Share of profit of the deceased partner to be computed up to the date of death on the basis of average net profit of the past three years. Average net profit of the past three years was ₹80,000.

(ii) His share in gain (profit) on revaluation of assets and reassessment of liabilities on the date of Bakul's death which was ₹29,700

(iii) Net amount payable to Bakul's executors was transferred to his Loan account, to be paid later on.

Prepare Bakul's Capital A/c and Bakul's Executor's Account.

29. Charu, Dhwani, Iknoor and Paavni were partners in a firm. They had entered into partnership firm last year only, through a verbal agreement. They contributed Capitals in the firm and to meet other financial requirements, few partners also provided loan to the firm. Within a year, their conflicts arisen due to certain disagreements and they decided to dissolve the firm. The firm had appointed Ms. Kavya, who is a financial advisor and legal consultant, to carry on the dissolution process. In the first instance, Ms. Kavya had transferred various assets and external liabilities to Realisation A/c. Due to her busy schedule; Ms. Kavya has delegated this assignment to you, being an intern in her firm. On the date of dissolution, you have observed the following transactions:

(i) Dhwani's Loan of ₹50,000 to the firm was settled by paying ₹42,000.

(ii) Paavni's Loan of ₹40,000 was settled by giving an unrecorded asset of ₹45,000.

(iii) Loan to Charu of ₹60,000 was settled by payment to Charu's brother loan of the same amount.

(iv) Iknoor's Loan of ₹80,000 to the firm and she took over Machinery of ₹60,000 as part payment.

You are required to pass necessary entries for all the above mentioned transactions

30. P, N and S are partners sharing profits in the ratio of 3 : 2 : 1. N retired from the firm due to   6
illness. The balance sheet as on 31.03.2023 of the firm was as follows:

Liabilities	Amount (₹)	Assets		Amount (₹)
General Reserve	60,000	Bank		38,000
Sundry Creditors	1,40,000	Debtors	30,000	
Bills Payable	60,000	Less: Prov. for		
Outstanding Salary	11,000	doubtful Debt	2,000	28,000
Provision for Legal Damages	30,000	Stock		1,10,000
Capitals:		Furniture		2,05,000
P: 2,30,000		Premises		4,00,000
N: 1,50,000				
S: 1,00,000	4,80,000			
	7,81,000			7,81,000

Additional Information:

(i) Premises are undervalued by 20%, stock is overvalued by 10 % and provision for doubtful debts was to be made 5% on debtors. Further provision for legal damages is to be made for ₹20,500 and furniture to be brought up to ₹2 29,500.

(ii) Goodwill of the firm be valued at ₹2,10,000

(iii) ₹1,30,000 from N's Capital account be transferred to his loan account bearing interest @12% p.a and balance be paid through bank, if required, necessary loan may be obtained from Bank.

(iv) New Profit Sharing ratio of P and S is decided to be 5 : 1.

Prepare Revaluation Account and Partner's Capital Account.

31. On 31st March 2019 the Balance Sheet of Madan and Mohan who share profits and losses in   6
the ratio 3 : 2 was as follows:

Liabilities	Amount (₹)	Assets		Amount (₹)
Creditors	28,000	Cash at Bank		10,000
General reserve	10,000	Debtors	65,000	
Providend Fund	22,000	Less Provision	5,000	60,000
Capital		Stock		33,000
Madan	60,000	Patents		57,000
Mohan	40,000			
	1,60,000			1,60,000

They decided to admit Gopal on 1st April 2019 for 1/5th share which he acquired wholly from Mohan on the following terms:

(i) Gopal shall bring share of Goodwill in cash ₹10000

(ii) A debtor whose due of ₹3000 were written off as bad debt paid ₹2000 in full settlement

(iii) A claim for ₹5,000 on account of workmen Compensation was to be provided for .

(iv) Patents were undervalued by ₹2,000 and Stock was valued 10% more than market value.

(v) Gopal will bring 20% of combined capital of Madan and Mohan after necessary adjustment.

Prepare Revaluation Account and Partners Capital Account.

32. The net profit of a firm for the year ended 31st March, 2023, was ₹30,000, which has been   6
duly distributed amongst its three partners A, B and C in their agreed proportions of 3 : 1 : 1 respectively. It was discovered on 10th April, 2023 that the under mentioned transactions were not passes through the books of accounts of the firm for the year ended 31st March, 2023, which stood duly closed on that date:

a) Interest on capital at 10%.
b) Interest on drawings: A ₹350; B ₹250; C ₹150.
c) Salary of ₹5,000 to A and ₹7,500 to B.
d) Commission due to A on a special transaction ₹3,000.

The capital account of the partner which are fixed on 1st April, 2022 were A ₹25,000; B ₹20,000 and C ₹15,000

You are requested to suggest a journal entry to be passed on 10th April, 2023 which will not affect the Profit and Loss Appropriation Account of the firm for the year ended 31st March, 2023 and at the same time rectify the position of the partners. [Show yours working clearly]

OR

On March 31, 2022 the capital account of Elvin, Monu and Ahmed after making adjustment for profits, drawings etc. were as Elvin - ₹80,000; Monu - ₹60,000; and Ahmed - ₹40,000.

Subsequently, it was discovered that interest on capital and interest on drawing had been omitted. The partners were entitled to interest on capital @5% p.a. The drawings during the year were: Elvin - ₹20,000; Monu - ₹15,000; and Ahmed - ₹9,000 Interest on drawings chargeable to the partners was Elvin - ₹500; Monu - ₹360; and Ahmed - ₹200. The net profit for the year ended 31st March, 2022 amounted to ₹1,20,000. The profit sharing ratio of the partners was 3 : 2 : 1.

Record the necessary adjustment entry for rectifying the above errors of omission. [Show yours working clearly]

33. Ravi Shankar and Madhur were partners in a firm sharing profits in the ratio of 7 : 2 : 1. On 31st March, 2022, the firm was dissolved, after transferring sundry assets (other than cash in hand and cash at bank) and third party liabilities in the realization account the following transactions took place: 6

(i) Debtors amounting to ₹1,40,000 were handed over to a debt collection agency which charged 5 % commission. The remaining debtors were ₹47,000, out of which debtors of ₹17,000 could not be recovered because the same become insolvent.

(ii) Creditors amounting to ₹5,000 were paid ₹3,500 in full settlement of their claim and balance creditors were handed over stock of ₹90,000 in full settlement of their claim of ₹95,000.

(iii). A bills receivable ₹2,000 discounted with the bank was dishonoured by its acceptor and the same had to be met by the firm.

(iv) Amitesh, an old customer whose account for ₹60,000 was written off as bad debt in the previous year, paid 90%.

(v) Land & Building was sold for ₹3,00,000 through a broker who charged 2% commission

(vi) The firm had a debit balance of ₹15,000 in the Profit and Loss Account on the date of dissolution.

OR

Following is the balance Sheet of A and B as at 31st March, 2023:

Liabilities	Amount (₹)	Assets		Amount (₹)
Sundry Creditors	30,000	Cash in Hand		5,500
Bills Payable	8,000	Cash at Bank		8,000
Loan by Mrs. A	5,000	Stock		5,000
Loan by Mrs. B	10,000	Investments		10,000
Loan by B	5,000	Debtors	20,000	
General Reserve	10,000	Less: Provision for		
Investment Fluctuation Reserve	1,000	Doubtful Debts	2,000	18,000
A's Capital	13,000	Plant and Machinery		20,000
B's Capital	13,000	Building		15,000
		Goodwill		4,000
		Profit & Loss A/c		3,500
		Loan to A		6,000
	95,000			95,000

The firm was dissolved on 1st April, 2023 and following transactions took place:

(i) Mr. A agreed to repay the loan of Mrs. A

(ii) B took half of the investments @ 10% discount.

(iii) Debtors realised ₹19,000

(iv) Creditors and Bills Payable were due after one month but they were paid immediately at a discount of 6 % p.a.

(v) Plant realised ₹25,000 and Building ₹40,000

(vi) There was an old printer in the firm which had been written off completely from the books. It is now estimated to realise ₹300. It was taken by B at this estimated price.

(vii) Realisation expenses were ₹1,000.

(viii) A took Stock at ₹4,000

You are required to prepare Realisation Account and Partners' Loan Account

34. a) A, B and C are partners sharing profits and losses in the ratio of 2:2:1. They admitted D for 1/4th share with effect from 1st April, 2022. An extract of their Balance Sheet as at 31st March 2022 is as follows: 6

Liabilities	Amount (₹)	Assets	Amount (₹)
Investment Fluctuation Reserve	80,000	Investment (at Cost)	6,00,000

Pass the journal entries under the following cases-

(i) If the market value of investment is ₹6,60,000.

(ii) If the market value of investment is ₹5,50,000.

(iii) If the market value of investment is ₹5,00,000.

b) L, M and N are partners sharing profits and losses in the ratio of 1 : 1 : 1. They admitted O for 1/5th share with effect from 1st April, 2022. An extract of their Balance Sheet as at 31st March 2022 is as follows:

Liabilities	Amount (₹)	Assets	Amount (₹)
Workmen Compensation Reserve	60,000		

Pass the journal entries under the following cases-

(i) If there is no claim for workmen compensation.

(ii) If a claim for workmen compensation is estimated at ₹45,000.

(iii) If a claim for workmen compensation is estimated at ₹1,20,000

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D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

CLASS: XII **MAXIMUM MARKS: 80**
SUBJECT: APPLIED MATHEMATICS (241) **TIME: 3 HOURS**

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General Instructions:

1. This Question paper contains 5 printed pages and 38 questions divided into five sections **A, B, C, D, E**. All questions are compulsory.
2. **Section A (Q. 1 to Q. 20)** has **18 MCQ's and 02 Assertion Reason** based questions of   1 mark each.
3. **Section B (Q. 21 to Q. 25)** has **5 Very Short Answer (VSA)** questions of 2 marks each.
4. **Section C (Q.26 to Q.31)** has **6 Short Answer (SA)** questions of 3 marks each.
5. **Section D (Q.32 to Q. 35)** has **4 Long Answer (LA)** questions of 5 marks each.
6. **Section E (Q. 36 to Q. 38)** has **3 source based/case based/passage based/integrated units of assessment** (04 marks each) with sub parts.
7. (a) Internal Choice is provided in 2 questions in **Section-B**, 2 questions in **Section-C**, 2 Questions in **Section-D.**

   (b) **Section – E** has 3 case based questions, each of which contains three subparts. Internal choice has been provided in one of the subpart in those questions. You have to attempt only one alternatives in all such questions.

Section A

1. The last digit of 6^{2024} is 1
    (a) 2 (b) 4 (c) 6 (d) 8

2   $(18 \times 10)(mod\ 8)$ is equal to 1
    (a) 2 (b) 3 (c) 4 (d) 5

3   In what ratio must rice at Rs. 29.30 per kg be mixed with rice at Rs. 30.80 per kg so that the mixture be worth Rs. 30 per kg? 1
    (*a*) 7: 8 (*b*) 8: 7 (*c*) 3: 8 (*d*) 8: 3

4   A boat goes downstream at u km/hr and upstream at v km/hr. The speed of the stream in km/hr, is 1
    $(a)\dfrac{u+v}{2}$ $(b)\dfrac{u-v}{2}$ $(c)\dfrac{u+v}{4}$ $(d)\dfrac{u-v}{4}$

5   In a race of 400 meters, A can give B a start of 20 meters and C a start of 39 meters. How much start can B give to C in the same race? 1
    (a) 20 meters (b) 15 meters (c) 18 meters (d)25 meters

6   The matrix $\begin{bmatrix} 0 & 15 & -70 \\ -15 & 0 & 131 \\ 70 & -131 & 0 \end{bmatrix}$ is 1
    (a) A symmetric matrix (b) A skew-symmetric matrix
    (c) A diagonal matrix (d) An upper triangular matrix

7   A matrix $A = [a_{ij}]$ of order 3×3 whose elements are given by $a_{ij} = \dfrac{(2i+j)^2}{i+j}$,then the element a_{32} of matrix A is 1
    (a) 12 (b) 18 (c) $\dfrac{16}{5}$ (d) $\dfrac{64}{5}$

8   If $\begin{vmatrix} 2x & -1 \\ 4 & 2 \end{vmatrix} = \begin{vmatrix} 3 & 3 \\ 1 & 2 \end{vmatrix}$, then x is 1
    (a) 3 (b) $\dfrac{2}{3}$ (c) $\dfrac{3}{2}$ (d) $-\dfrac{1}{4}$

9   Given a matrix A of order 3×3, if $|A| = 3$, then $|A. \operatorname{adj}(A)| =$ 1
(a) 3   (b) 27   (c) 9   (d) 81

10   If $x = t^2$ and $y = t^3$ then $\frac{d^2y}{dx^2}$ is equal to   1

(a) $\frac{3}{2}$ (b) $\frac{3}{4t}$ (c) $\frac{3}{2t}$ (d) $\frac{3t}{2}$

11   If $y = ae^{px} + be^{-px}$, then $\frac{d^2y}{dx^2} =$ (a) p^2y (b)py (c) $-p^2y$ (d) $-py$ 1

12   The radius of a circular plate is increasing at the rate of 0.01cm/sec. The rate of increase of its   1
area when the radius is 10cm, is
(a) $20\pi\ cm^2/sec$ (b) $0.20\pi\ cm^2/sec$ (c) $2\pi\ cm^2/sec$ (d) $0.02\pi\ cm^2/sec$

13   The interval in which $y = x^2 e^{-x}$ is increasing is   1
(a)$(-\infty, \infty)$ (b) $(-2,0)$ (c) $(2, \infty)$ (d) $(0,2)$

14   Which one is correct?   1

(a) $MAC = \frac{1}{x}(MC - AC)$ (b) $MAC = \frac{1}{x}(MC + AC)$

(c) $MAC = (MC - AC)$ (d) $MAC = (MC + AC)$

Where MC= Marginal Cost, AC=Average Cost, MAC= Marginal Average Cost

15   If the demand function is $p(x) = 20 - \frac{x}{2}$, then the marginal revenue when $x = 10$ is   1

(a) Rs. 5   (b) Rs. 10   (c) Rs. 15   (d) Rs. 150

16   $\int e^x \left(\frac{1}{x} - \frac{1}{x^2}\right) dx$ is   1

(a)$e^x\ \frac{1}{x} + C$ (b)$e^x\ + C$ (c)$e^x\ \frac{1}{x^2} + C$ (d)$\frac{1}{x} + c$

17   $\int \frac{1}{x(x^7+1)} dx$ is equal to   1

(a) $\log\left|\frac{x^7}{x^7+1}\right| + c$ (b)$\frac{1}{7}\log\left|\frac{x^7}{x^7+1}\right| + c$ (c) $\log\left|\frac{x^7+1}{x^7}\right| + c$ (d)$\frac{1}{7}\log\left|\frac{x^7+1}{x^7}\right| + c$

18   If $\int xe^{kx^2} dx = \frac{1}{4}e^{kx^2} + c$, then the value of k is   1

(a) 4   (b) -2 (c) 2   (d) 1

ASSERTION-REASON BASED QUESTIONS
In the following questions, a statement of Assertion (A) is followed by a statement of Reason
(R). Choose the correct answer out of the following choices.
(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.

19   **Assertion (A):** The minor of (-1) in the matrix $\begin{bmatrix} 2 & 5 & 8 \\ 0 & 3 & 7 \\ -1 & -2 & 6 \end{bmatrix}$ is 11.   1

Reason (R): The determinant that is left by cancelling the row and column intersecting at a particular
element called the minor.

20   **Assertion(A):** The function $f(x) = x^3 - 3x^2 + 6x - 99$ is strictly increasing function on $\mathbb{R}$ 1
Reason(R): If a function f(x) is continuous in [a, b], derivable in (a, b) and $f'(x) <$
$0\ \forall x \in (a, b)$, then f is a strictly decreasing function.

Section B

21   Solve the inequality: $\frac{1}{2x-1} > 0$, $x \in \mathbb{R}$ 2

OR

Solve the inequality: $10 \le 3x - 4 \le x + 2$, $x \in \mathbb{R}$

22   If $\begin{bmatrix} x + 3y & y \\ 7 - x & 4 \end{bmatrix} = \begin{bmatrix} 4 & -1 \\ 0 & 4 \end{bmatrix}$, find the values of x and y.   2

OR

If $A = \begin{bmatrix} 3 & -1 & 0 \\ 4 & 2 & 1 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & -1 \\ 4 & 0 \\ 3 & 6 \end{bmatrix}$, then find $A - 3B^T$.

23   If A is a skew-symmetric matrix of order 3, then prove that $|A| = 0$.   2
24   Find the equation of tangent and normal to the give curve $y = x^3$ at $(1, 1)$ 2
25   Evaluate: $\int (e^{x\log a} + e^{a\log x} - e^{a\log a})\, dx$ 2

Section C

26   Three pipes A, B and C are installed to fill a tank. Pipes A and B opened together can fill the   3
      tank in the same time in which C can alone fill the tank. If pipe B can fill the tank 15 minutes
      faster than pipe A and 5 minutes slower than pipe C, then find the time required by pipe A to fill
      the tank alone.

27   If $A = \begin{bmatrix} 2 & 3 \\ 5 & -2 \end{bmatrix}$ be such that $A^{-1} = kA$, then find the value of k.   3

28   If $y = x^x$, prove that $\dfrac{d^2y}{dx^2} - \dfrac{1}{y}\left(\dfrac{dy}{dx}\right)^2 - \dfrac{y}{x} = 0$ 3

OR

      If $e^y(x + 1) = 1$, then show that $\dfrac{d^2y}{dx^2} = \left(\dfrac{dy}{dx}\right)^2$

29   Show that the function $f(x) = 4x^3 - 18x^2 + 27x - 7$ has neither maxima nor minima.   3
30   Find the interval in which the function $f(x) = x^x, x > 0$ is strictly increasing.   3

OR

      The volume of a spherical balloon is increasing at the rate of 3cm³/sec. Find the rate of change
      of its surface area when its radius is 2cm.

31   Evaluate: 3
      $$\int \frac{\log(\log x)}{x}\, dx$$

Section D

32   If $A = \begin{bmatrix} 1 & -1 & 1 \\ 2 & 1 & -3 \\ 1 & 1 & 1 \end{bmatrix}$, find A^{-1} and hence solve the system of linear equations   5
      $x + 2y + z = 4, -x + y + z = 0, x - 3y + z = 2$

33   Using properties of determinants, prove that $\begin{vmatrix} a+b+2c & a & b \\ c & b+c+2a & b \\ c & a & c+a+2b \end{vmatrix} =$ 5
      $2(a + b + c)^2$

OR

      Solve the following system of linear equations by Cramer's rule:
      $$6x + y - 3z = 5, x + 3y - 2z = 5, 2x + y + 4z = 8$$

34   The cost of manufacturing of certain items consists of 1600 as overheads, Rs.30 per item as the   5
      cost of material and the labour cost $\dfrac{x^2}{100}$ for x items produced. How many items must be produced
      to have a minimum average cost?

35   Evaluate: 5
      $$\int \frac{x + 2}{\sqrt{x^2 + 5x + 6}}\, dx$$

OR

      Evaluate :
      $$\int \frac{2x + 3}{(2 - x)(x^2 + 3)}\, dx$$

36 **Case - Study 1**

Hridi is rowing a boat. She takes 6 hours to row 48 km upstream whereas she takes
3 hours to go the same distance downstream.

Based on the above information, answer the following questions:
(a) What is her speed of rowing in still water?   1
(b) What is the speed of the stream?   1
(c) What is her average speed?

OR   2

(c)The stream is flowing at the speed of 4 km/h. If Hridi rows a certain distance upstream in 3.5
hours and returns to the same place in 1.5 hours, then find the speed of Hridi's boat in still water.

37 **Case - Study 2**

Two institutions decided to award their employees for three values of resourcefulness,
competence and determination in the form of prizes at the rate of ₹x, ₹y, ₹z respectively per
person. The first institution decided to award respectively 4,3 and 2 employees with a total prize
money of ₹37000 and second institution decided to award respectively 5,3 and 4 employees
with a total prize money of ₹47000. All the three prizes per person together amount to ₹12000.
Based on the above information answer the following questions:
(a) Write the model linear equations representing the above information.
(b) Find the number of solutions of the system of linear equation representing the above   1
information.   1
(c) Using determinant method, find the value of x and y.

OR   2

(c) Using determinant method, find the value of y and z.

38 **Case-Study 3**

A cable network provider in a small town has 500 subscribers and he used to collect Rs 300 per
month from each subscriber. He proposes to increase the monthly charges and it is believed from
past experience that for every increase of Re.1, one subscriber will discontinue the service.

Based on above information, answer the following questions:
(a) If Rs. x is the monthly increase in subscription amount, then write the number of subscribers
in terms of x.   1
(b) Write the total revenue 'R' in terms of x.   1
(c) Find the number of subscribers which gives the maximum revenue.

OR   2

(c)What is increase in charges per subscriber that yields maximum revenue?

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DAV INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

CLASS- XII   **MAXIMUM MARKS- 60**
SUBJECT- BANKING (811)   **TIME- 3HOURS**

General Instructions:

1. Please read the instructions carefully.

2. This Question Paper consists of 24 questions in two sections – Section A & Section B.

3. Section A has Objective type questions whereas Section B contains Subjective type questions.

4. Out of the given (6 + 18) = 24 questions, a candidate has to answer (6 + 11) = 17 questions in the allotted (maximum) time of 3 hours.

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

6. SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):

     i. This section has 06 questions.

     ii. There is no negative marking.

     iii. Do as per the instructions given. iv. Marks allotted are mentioned against each question/part.

7. SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):

     i. This section contains 18 questions.

     ii. A candidate has to do 11 questions.

     iii. Do as per the instructions given.

     iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q. 1 Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)

i) To learn a language, one needs to develop four key skills.   1
Which one of the following is not an example of key skill?
a) Listening
b) Sleeping
c) Reading
d) Speaking

ii) A _____ is an arrangement of cells in a horizontal (sleeping) manner.   1

iii) Which one of the following is the correct process of communication?   1
a) Sender – Encoding – Channel – Decoding – Media – Feedback
b) Sender – Media – Channel – Decoding – Receiver – Feedback
c) Sender – Channel – Encoding – Decoding – Receiver – Feedback
d) Sender – Encoding – Channel – Decoding – Receiver – Feedback

iv) There are five parameters that describe an individual's personality. These five   1
dimensions are also called the 'Big Five Factors'
Which of the following is not a dimension of Big Five Factors?
a) Openness
b) Consciousness
c) Extraversion
d) Personality disorders

v) People with this type of personality disorder disregard social rules and obligations. They   1
are irritating and aggressive, and act impulsively.
Identify the type of personality disorder explained in the above statement.
a) Antisocial personality disorder
b) Borderline personality disorder
c) Histrionic personality disorder
d) Narcissistic personality disorder

vi) A _____ is an electronic document used to store data in a systematic way and perform calculations just like an expense sheet.   1
a) spreadsheet
b) worksheet
c) workbook
d) name box

Q. 2   Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)

i)   It is a contract for delivering goods by one party to another to be held in trust for a specific purpose and returned when the purpose is over.   1
Identify the correct term explained in the above statement.
a) Delivery
b) Insurance
c) Bailment
d) hiring the locker

ii)   Which one of the following is not an example of paper based fund transfer system in a bank?   1
a) Cheques
b) Demand Draft
c) Banker's Cheque
d) UPI transfer

iii)   There are a few large value payment systems functioning in the country.   1
Which one of the following is not an example of large value payment systems?
a) Cash payment Systems
b) Inter-Bank Cheques Clearing Systems
c) Foreign Exchange Clearing System
d) Real Time Gross Settlement (RTGS) System.

iv)   The relationship between a person hiring the locker and the bank is that of _____ and _____.   1
a) a bailor and a bailee
b) bankers and a customer
c) a lender and a borrower
d) a lessor and a lessee.

v)   Which one of the following is not a correct terms and condition for hiring Bank Locker?   1
a) The safe deposit vault will remain open on bank working days during ordinary banking hours.
b) The rent is payable strictly in advance for a minimum period of two months.
c) All repairs required to be done to the locker; lock or keys shall be done exclusively by workmen appointed by the bank.
d) In case of loss of keys, the Bank should be notified without delay. All charges for opening and replacing the locker or keys shall be payable by the hirer(s).

vi)   The G-Sec Clearing and the Forex Clearing are managed by the _____.   1
a) CCIL
b) SIPS
c) RTGS
d) MICR

vii)   Statement I- Depositories are agents who carry out transactions for buyers or sellers.   1
Statement II- A DP is an agent of the depository and functions as the interacting medium between the depository and the investor.
a) Both the statements are false.
b) Both the statements are true
c) Statement I is true but Statement II is false
d) Statement I is false but statement II is true

Q. 3 **Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)**

i) DNS stands for _____.   1

ii) There are_____ settlements from 8 amto7pm on week days except Saturday.   1
   a) 6
   b) 12
   c) 9
   d) 10

iii) In NEFT operation, the originating bank branch prepares a message and sends the   1
   message to its pooling centre.
   The pooling centre also called_____.
   a) Clearing House
   b) Collection Centre
   c) NEFT Service Centre
   d) RBI Regional Centre

iv) There are six settlements from 8 am to 1 pm on Saturdays.   1
   a) 6
   b) 12
   c) 7
   d) 9

v) What is the full form of CFC?   1
   a) Centre for Customers
   b) Customers for Customers
   c) Clearing for Customers
   d) Customer Facilitation Centre

vi) Which one of the following is an advantage of NEFT?   1
   a) It is a negotiable instrument
   b) It can be endorsed to any body
   c) The beneficiary need not visit his / her bank
   d) All of the above

vii) How many parties are involved in a Bank guarantee   1
   a) 2
   b) 4
   c) 3
   d) 5

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

i) Which one of the following is not a feature of BG?   1
   a) Guarantee is always issued for a specific amount
   b) The purpose of the guarantee is clearly stated
   c) Guarantee is valid for a maximum period of 2 months
   d) All of the above

ii) Guarantee issued is for completing a particular task in the prescribed/ agreed upon   1
   manner as stated in the guarantee document.
   Identify the type of BG explained in the above statement.
   a) Financial Guarantee
   b) Performance Guarantee
   c) Bid Bond Guarantee
   d) Deferred Payment Guarantee

iii) _____ is the commission paid by AMC (Mutual Funds Company) to   1
   agent in the first year which varies from scheme to scheme (0.40 % to 1.00%)

iv) _____ is the commission paid to agents by AMC in subsequent years   1
   which is percentage of total AUM (aspects under management) which varies from 0.05%
   to 0.40%

v)   What is Phishing?   1
a) is an electronic instrument for fishing
b) is related to cybercrime
c) is one of the latest forms of wishing somebody
d) None of the above

vi)   Currently, which bank has the highest ATMs network?   1
a) ICICI Bank   b) SBI Bank
c) HDFC Bank   d) Central Bank

Q. 5 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)

i)   Full form of ALU is_____   1
a) Arithmetic Login unit
b) Arithmetic Logic unit
c) Arithmetic Logic unique
d) Arithmetic Logo unit

ii)   Data validation is made by the _____ and _____ procedures.   1
a) Data Recording and Data Analysing
b) Error Recording and Error correction
c) Error detection and Error correction
d) Data collection and data Recording

iii)   CBS is based on _____ architecture.   1
a) Server Orientation   b) Service Orientation
c) Server Oriented   d) Service Oriented

iv)   CBS helps in customer convenience through _____ and _____Banking   1
a) Anywhere and Anytime
b) Commercial Banking and Cooperative Banking
c) Small and Larg Banking
d) None of the above

v)   AML stands for _____.   1
a) Automated Money Laundering   b) Anti Money Laundering
c) Any time Money Laundering   d) All Money Loan

vi)   Transaction processing system (TPS) is the first stage of computerised accounting system.   1
Which one of the following is the correct steps of TPS?
a) Data Entry – Data Validation – Processing and Revalidation
b) Processing and Revalidation - Storage – Information and Reporting.
c) Data Validation – Processing and Revalidation - Storage
d) Data Validation – Data Entry – Processing and Revalidation

Q. 6 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)

i)   Computerized accounting uses the concept of_____   1
a) Real time based
b) Self Oriented Based
c) Processing Based
d) Databases

ii)   Match the following: 1

1) Core Banking system	i) Steal Login information
2) Money Laundering	ii) Various delivery channels
3) Trojan Horse	iii) Converting black money to white money

a) 1) - i); 2) – ii); 3) – iii)
b) 1) - ii); 2) – iii); 3) – i)
c) 1) - iii); 2) – ii); 3) – i)
d) 1) - 2); b) – iii); 3) – ii)

iii) Statement I- CPU is the brain of a computer   1
      Statement II- CBS is networking of computers which allows any-where and any-time
      banking
      a) Both the statements are false
      b) Both the statements are true
      c) Statement I is true but Statement II is false
      d) Statement I is false but statement II is true

iv)   What is the full form of BPM?   1
      a) Bank Power Management   b) Business Process Management
      c) Below Process Manage   d) Banking Loan Processing Management

v)   There is a time limit for the card issuing banks for re-crediting the customer's account   1
      for a failed ATM transaction. As per the RBI instructions banks have been mandated to
      resolve customer complaints by re-crediting the customer's account within _____
      working days from the date of complaint.
      a) 7   b) 3   c) 2   d) 24

vi)   PKI stands for_____.   1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks) Answer each question in 20 – 30 words.

Q. 7   Write one sentence of each type —   2
       i) statement, ii) question, iii) exclamatory and iv) order.
Q. 8   Explain any two Stages of active listening.   2
Q. 9   Define the following: 2
       a) Intrinsic motivation   b) Extrinsic motivation
Q. 10 What is stress and how to manage it (any two)?   2
Q. 11 State any two Types of spreadsheet.   2

Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6 marks)

Q. 12 Explain any two duties of Bailor.   2
Q. 13 What is IFSC? Explain.   2
Q. 14 Explain ant two benefits of NEFT.   2
Q. 15 Explain any two needs of CBS.   2
Q. 16 What is SMS Payments?   2

Answer any 2 out of the given 3 questions in 30– 50 words each (3 x 2 = 6 marks)

Q. 17 Explain the essentials of Bailment   3
Q. 18 A bailee's duties are to take as much care of the goods bailed as a person of ordinary   3
       prudence would take in respect of their own goods of the same nature and value, and not
       to make unauthorized use of the goods. Apart from these duties, a bailee has a number of
       liabilities. Explain any three liabilities of a bailee.
Q. 19 State the components of Computerised accounting software.   3

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

Q. 20 It is a cheque that contains an order by one branch of a bank (Drawer branch) directing   4
       another branch of the same bank (Drawee branch) to pay on demand a certain sum of
       money to a specified beneficiary (Payee).
       a) Identify the type of instrument explained in the above statement.
       b) Explain any three features of the instrument identified in part (a).
Q. 21 Differentiate between Banker's Cheque and Demand Draft (any four).   4
Q. 22 Explain any four advantages of a Debit Card.   4
Q. 23 Define the following terms.   4
       i) WAP Payments   ii) Downable Apps
Q. 24 What are the security measures implemented in mobile banking?   4

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D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

Class: XII   **MAXIMUM MARKS:-70**
Subject: BIOLOGY   **TIME: 3 HOURS**

General Instructions
- *The question paper has 5 sections and 33 questions. All questions are compulsory,*
- *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.*

Section-A

1   Given are few characteristics of a flower: 1
    (i) Large, feathery and sticky stigma.
    (ii) Well-exposed stamens.
    (iii) Light and non-sticky enormous amount of pollen.
    Identify the kind of pollination that takes place in it.
    A) Hydrophily   B) Entomophily   C) Anemophily   D) Cross-pollination

2   Which flower is pollinated by insects?   1
    (A) Vallisineria   (B) Hydrilla
    (C) Water hyacinth   (D) None of these

3   The correct order through which milk reaches nipples is: 1
    (A) Alveoli → mammary tubules → mammary ducts → mammary ampulla → lactiferous duct.
    (B) Alveoli → mammary ducts → mammary ampulla → mammary tubules → lactiferous duct.
    (C) Alveoli → mammary ampulla → mammary ducts → mammary tubules → lactiferous duct.
    (D) Alveoli → mammary tubules → mammary ducts → lactiferous duct. → mammary ampulla

4   Which one is a copper releasing IUD ?   1
    A) LNG 20   B) Multiload 375
    C) Lippes loop   D) Progestasert

5   Progestin-estradiol combined contraceptive pills inhibit ovulation by   1
    A) negative feedback on the release of estrogen from ovary required for follicular development in follicular phase
    B) preventing the uterine physiological and morphological changes required for implantation
    C) inhibiting the secretion of follicle stimulating hormone (FSH) and luteinising hormone (LH) that are necessary for ovulation
    D) both (A) and (C).

6   The recombinant frequency between the four linked genes is as follows: 1
    (i) between X and Y is 40%
    (ii) between Y and Z is 30%
    (iii) between Z and W is 10%
    (iv) between W and X is 20%
    Select the option that shows the correct order of the position of W, X, Y and Z genes on the chromosome
    (A) Y-X-Z-W   (B) X-Z-W-Y
    (C) X-Y-Z-W   (D) Z-X-Y-W

7   In Mendel's experiments with Garden Pea, round seeds shape (RR) were dominant over wrinkled   1
    seeds (rr), yellow cotyledons (YY) were dominant over green cotyledons (yy). What are
    expected phenotypes in cross between RRYY x rryy?
    A) Only wrinkled seeds with green cotyledons.
    B) Only wrinkled seeds with yellow cotyledons.
    C) Only round seeds with yellow cotyledons.
    D) Round seeds with yellow cotyledons and wrinkled seeds with yellow cotyledons.

8   Starting with $^{15}N^{15}N$ (heavy) DNA, and after three generations in the ^{14}N medium, E. coli cells   1
will produce the following band(s) in density- gradient centrifugation:
A) One band of light DNA and one band of DNA with medium density.
B) One band of heavy DNA and one band of DNA with medium density.
C) One band of heavy DNA and one band of light DNA.
D) Three bands corresponding to DNA of light, medium and heavy density.

9   Match list-I with list-II and select the correct answer using the codes given below the lists.   1

List-I

P. The amount of energy accumulation in green plants through the process of photosynthesis.

Q. The total organic matter synthesized by the producers in the process of photosynthesis per unit time and area.

R. Rate of storage of organic matter in plant tissues in excess of the respiratory utilization during the measurement period.

S. Rate of energy storage at consumer level.

List-II

1. Gross primary productivity
2. Primary productivity
3. Secondary productivity
4. Net primary productivity

A) P-1, Q-2, R-3, S-4   B) P-2, Q-1, R-3, S-4

C) P-1, Q-3, R-4, S-2   D) P-2, Q-1, R-4, S-3

10   The term "The Evil Quartet" is related with   1
A) Four major causes of forest loss
B) Four major causes of population explosion
C) Four major causes of air pollution
D) Four major causes of biodiversity losses

11   A microbial biocontrol agent that can be used to control butterfly caterpillars is   1
A) *Trichoderma polysporum*
B) *Bacillus thuringiensis*
C) *Streptococcus*
D) mycorrhiza.

12   *Monascus purpureus* is a yeast commercially used in the production of   1
A) citric acid   B) ethanol
C) blood cholesterol lowering statins   D) streptokinase for removing clots from blood vessels

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.

13   **Assertion:** Self-incompatibility is a genetic mechanism which prevents self-pollination by   1
inhibiting either pollen germination or pollen tube growth in the pistil.
Reason: In gametophytic self-incompatibility, the incompatibility reaction is determined by the genotype of the sporophytic tissue.

14   **Assertion:** Second trimester abortions are much more complicated.   1
Reason: After 12 weeks, the fetus becomes intimately associated with the maternal tissues.

15   **Assertion:** Repetitive sequences make up very large portion of human genome.   1
Reason: Repetitive sequences do not have direct coding functions in the genome.

16   **Assertion:** The loss of biologically useful energy as heat with every energy transfer in a food   1
chain is a consequence of the second law of thermodynamics.
Reason: Energy does not remain trapped permanently in any organism, it is either passed on to higher trophic level or becomes available to detritivores and decomposers after the organism dies.

Section-B

17   Identify the parts labelled as A to D in structure of seed given below: 2

OR

Differentiate between microsporogenesis and megasporogenesis.

18   Why is phenylketonuria called pleiotropy?   2

OR

The child has a blood group of O. If the father has blood group A and mother has blood group B, work out the genotypes of the parents and the possible genotypes of the other offsprings.

19   Critically evaluate the Human Genome Project's classification as a 'Mega project' by considering   2
its scale, interdisciplinary collaboration.

20   Tundra, arctic & alpine biome has low net primary productivity. Mention any four abiotic factors
that contribute to the low productivity and explain how they affect the net primary productivity   2
of this biome.

21
SL NO	NAME OF ORGANISM	COMMERCIAL PRODUCT	APPLICATION
1.	*Penicillium notatum*	Penicillin	(a)
2.	(b)	Lactic Acid	Making Curd
3.	*Streptococcus*	Streptokinase	(c)
4.	*Trichoderma polysporum*	(d)	Immuno suppressive agent

2

Identify a, b, c, and d.

OR

State the importance of flocs in biological treatment of waste water.

Section-C

22   A) A watermelon has 120 seeds. Find out the least number of microspore mother cells and   3
megaspore mother cell involved in the process of seed formation.
B) Explain any two ways by which seed can be formed in a plant without fertilization.

23   Study the given diagram:-   3
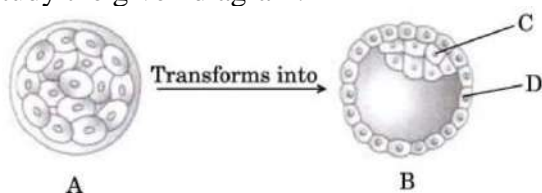
A is an embryonic stage that gets transformed into B which in turn gets implanted in the endometrium in human females.

(a)Identify A, B and its parts C and D.
(b)State the fate of C and D in the course of embryonic development in humans

OR

The following figure shows a foetus within the uterus of a human female. On the basis of the given figure, answer the questions that follow:-
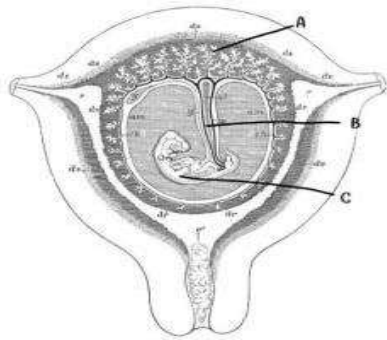
(a) In the above figure, name the part (A) that acts as a temporary endocrine gland.
(b) Why is it also called functional junction?
(b)Mention the role of B in the embryo development.

24 Suggest ART for the following   3
A) Low sperm count.
B) Female cannot produce ova but can provide suitable place for fertilization.
C) Inability of the male partner to inseminate.

25 Explain the mechanism of 'sex determination in birds. How does it differ from that of human   3
beings?

26 A short stretch of DNA that codes for a polypeptide is given below: 3
3'-CATCATAGATGAAA-5'
In the different cells of an organism, two different types of errors have occurred during replication of DNA and sequences of bases in the DNA in the two cells are given below:
Cell 1: 3'-CATCATAGATGAATC-5'
Cell 2: 3'-CATATAGATGAAAC-5'
(a) Write the type of mutation in cell 1 and cell 2, respectively.
(b)Write the mRNA transcribed by the mutated DNA in cell 1.
(c)How many amino acids are coded by this m-RNA?Justify your answer

27 A) Construct a pyramid of biomass in sea with phytoplankton and fishes. Explain giving reasons   3
about the characteristic of the constructed pyramid.
B) In which condition will the pyramid remain always upright?

28 Study the given diagram and answer the following questions.   3
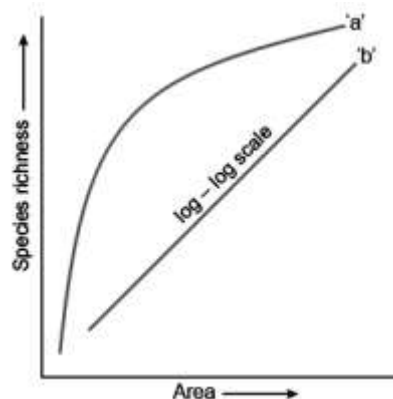
A) Write the equation for "a" and "b"
B) Value of Z (regression coefficient) is considered for measuring the species richness of an area.
If the value of Z is 0.7 for area A, and 0.15 for area B, which area has higher species richness and a steeper slope?

4

29 Read the given passage and answer the following questions.   4
    Various methods of birth control are available, including contraceptives (natural or traditional),
    intrauterine devices (IUDs), oral contraceptives, injectable contraceptives, implants, and surgical
    methods. Surgical methods are permanent family planning solutions and involve operative
    procedures. Medical termination of pregnancy (MTP) refers to voluntary or intentional abortion
    and is performed to terminate a pregnancy before reaching full term. MTP is primarily intended
    for ending unsustainable pregnancies.

    A) When was MTP legalized ?When was the amendment done in the rules of MTP. ?
    B) In what situations is medical termination of pregnancy (MTP) typically considered as a
    reproductive choice?
    C) How do surgical methods of family planning differ from other birth control methods?
                                              OR
    C) What is the significance of offering a variety of birth control methods to individuals and
    couples?

30 The various biomes ranging from driest desert to the moist rain forests, from the peak mountains   4
    to the deepest ocean trenches harbour an astounding variety of life which occurs in a marvelous
    spectrum of shapes, sizes, colours, life cycles and interrelationships. Biodiversity, the umbrella
    term for the degree of nature's variety, including both the number and frequency of ecosystems,
    species or genes in a given assemblage encompasses all species of plants, animals and microbes
    and the ecological complexes in which they occur. As a global asset bringing benefits to people
    in all parts of the globe, biodiversity is the very basis of human survival, providing food,
    medicine, energy, ecosystem functions, scientific insights, and cultural sustenance to mankind.
    Moreover, we have to respect that the other organisms have their intrinsic right to life.
    A) What are the consequences of biodiversity loss in a region?
                                              OR
    A) Give two instances of invasion by an alien species?
    B) Which group amongst the vertebrates is more vulnerable to extinction?
    C) Name a species that got extinct due to over exploitation.

Section-E

31 Various events during Menstrual cycle are given find out the day/days in which the event takes   5
    place-
    A) Corpus luteum starts to degenerate.
    B) LH and FSH surge.
    C) Proliferation of uterus.
    D) Primary follicles become Graafian follicle.
    E) Progesterone level start to increase.
                                              OR

    Given below is the diagram of a human ovum surrounded by a few sperms. Study the diagram
    and answer the following questions :-
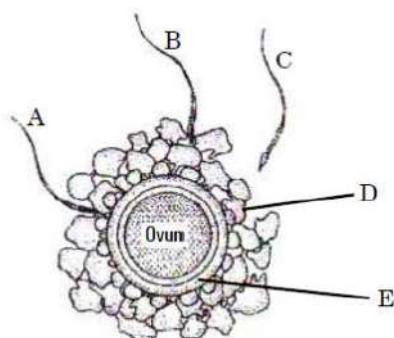
(a) Which one of the sperms would reach the ovum earlier ?
(b) Identify 'D' and 'E'. Mention the role of 'E'.
(c) Mention what helps the entry of sperm into the ovum and write the changes occurring in the ovum during the process.
(d) Name the specific region in the female reproductive system where the event represented in the diagram takes place'

32 The following pedigree chart shows the inheritance of haemophilia in a family. Answer the questions that follow:-   5
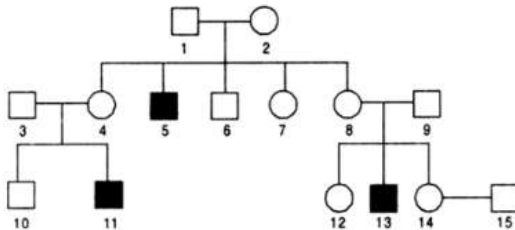
(a) What would be the possible genotype of members 2 and 5?
(b) A blood test shows that member 14 has haemophilia gene. What would be the probability that her child will be a haemophilic boy?
(c) Give the evidence from the above analysis which suggests that the disease is 1)Sex linked 2)Caused by a recessive allele.

OR

(a) Haemophilia and sickle cell anaemia are blood related Mendelian disorders. Yet they differ in their pattern of inheritance.Explain the difference.

(b)A woman with normal color vision,whose father was colorblind, married a man with normal color vision. Work out a cross to show the probability of children born to them with respect to color vision.

33 Observe the segment of hnRNA given below.   5
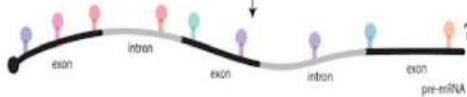
(a) Explain and illustrate the steps involved to make fully processed hn RNA.
(b) Gene encoding RNA polymerase I and III have been affected by mutation in a cell. Explain its impact on the synthesis of polypeptide, stating reason.

OR

(a) One of the codons on mRNA is AUG. Draw the structure of t-RNA adapter molecule for this codon.
(b) Name the RNA polymerase that transcribes t-RNA in eukaryotes.
(c) What is unique about the amino acid this t-RNA binds with?
(d)A segment of DNA molecule comprises 546 nucleotides. How many cytosine nucleotides would be present in it, if the number of adenine nucleotides is 96?

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D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION : 2024-2025

CLASS : XII   **MAXIMUM MARKS : 80**
SUBJECT : BUSINESS STUDIES   **TIME : 3 HOURS**

General Instructions:
1. Please check that this question paper contains 34 questions.
2. Please write down the serial number of the question before attempting it.
3. Marks are indicated against each question.
4. Answers to the questions carrying 3 marks may be 50 to 75 words, 4 marks answers may be about 150 words and answers for 6 marks questions may be about 200 words.
5. There is no overall choice . However internal choice has been provided for 2 questions of 1 mark each, 2 questions of 3 marks each, 2 question of 4 marks and 2 questions of 6 marks each.

1. Roy is working as a marketing manager in a company producing school stationeries. He had taken the responsibility of selling 50000 units of registers at the cost of ₹100 per unit within 10 days positively. He is able to sell all the units within the stipulated time, but had to sell last 1000 units at 15% discount in order to complete the target. In such a situation, he will be considered to be :   1
(a) An efficient manager   (b) An effective manager
(c) Both effective and efficient manager   (d) None of the above

2. Which of the following statements is not true for lower-level management?   1
(a) Analyse the business environment and its implications for the survival of the business.
(b) Ensure the quality of the output.
(c) They strive to reduce the wastage of resources.
(d) They ensure that safety standards are maintained within the organisation.

3. According to this principle of general management, "an organisation should be concerned about the abuse of managerial power, but at the same time a manager should have the necessary power to carry out his responsibility." Name the principle of management being described in the given statement :   1
(a) Discipline   (b) Authority and responsibility
(c) Unity of command   (d) Unity of direction

For Q. No. 4 & 5 (Assertion – Reason)
Given below are two statements, one labelled as Assertion (A) and other labelled as Reason (R):
Choose the correct option out of the following 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):** Management principles are not as rigid as principles of pure science.   1
Reason(R): Management principles deal with human behaviour.

5. **Assertion (A):** The various elements of business environment are closely interrelated.   1
Reason(R): Business environment is a relative concept since it differs from country to country.

6. Telegram, Twitter, WhatsApp, Facebook etc. have become a daily need not only for the family, friends and followers, but also for the business organisations to perform day to day activities. Those are the examples of which business environment?   1
   (a) Political   (b) Economic   (c) Technological   (d) Legal

7. Health Care Private Ltd. is a well-known company making food and beverages. This company has left behind several competing companies. The success story of the company has become a case study for the students of management. One study revealed that the company was paying much attention to the planning function of management. It was found that the people in all levels are very dedicated to their work and all the activities are well planned. Top level management does planning for the whole organisation whereas Middle level management does departmental planning and Lower level management plans the daily activities to be completed by the workers.   1

   Identify the feature of planning in the above event.

   (a) Planning is continuous.   (b) Planning is futuristic.

   (c) Planning involves decision making.   (d) Planning is pervasive.

8. Ms Anita, financial manager of ABC Ltd., has prepared the annual statement of proposed expenditure to be presented in the Annual General Meeting. Identify the type of plan formulated by the financial manager.   1

   (a) Budget   (b) Objectives   (c) Rules   (d) Programmes

   Or

   The sequence of steps or actions to be taken to enforce a policy and attain pre-determined objectives is called :

   (a) Objective   (b) Policy   (c) Procedure   (d) Strategy

   For Q. No. 9 to 11 (Case based MCQs)

   Rox Ltd. Is the producer of various electronic goods. The company has established separate divisions each headed by a divisional manager. The divisional managers have complete authority over their division, follows a narrow span of control and are responsible for their divisions. Each divisional manager is responsible and accountable for production, finance, human resource and marketing of the products. However the organisation is struggling with duplicacy and overlapping of work.

9. What type of organisational structure is followed by Sri Ram Ltd.   1

   (a) Functional Structure   (b) Matrix structure

   (c) Divisional structure   (d) None of the above

10. Divisional manager can be identified with   1

    (a) Top level management   (b) Lower level management

    (c) Middle level management   (d) All of the above

11. Each division of Rox Ltd. follows a narrow span of control. This will promote :   1

    (a) Responsibility   (b) Specialization

    (c) Division of work   (d) Decentralization

12. "There is no need of human resource planning as so many people are available in the market these days". Which function of management proved this statement wrong?   1

    (a) Planning   (b) Organising   (c) Staffing   (d) Directing

13. Which test is conducted to find out the potential of learning new job in the candidate?   1

    (a) Intelligence Test   (b) Aptitude test

    (c) Personality Test   (d) Trade Test

14. Mac, a Chief Manager in a company using highly sophisticated machines and equipment. He wants every employee should be fully trained before using the machines and equipments, Suggest the best method of training that Mac can use for training of the employees.   1

    (a) Apprenticeship Training   (b) Internship

    (c) Induction   (d) Vestibule Training

15. Alpha Enterprises is a company manufacturing water geysers. The company has a functional structure with four main functions-Production, Marketing, Finance and Human Resource. As the demand for the product grew, the company decided to hire more employees.   1

    Identify the concept which will help the Human Resource Manager in deciding the actual number of persons required in each department.

    (a) Workforce Analysis   (b) Span of Management

    (c) Workload analysis   (d) Both (a) and (b)

16.   Respect and Recognition is a part of :-   1
      (a) Physiological Needs   (b) Social Needs
      (c) Safety and Security Needs   (d) Esteem Needs

17.   Grape Vine is –   1
      (a) Formal Communication
      (b) Informal Communication
      (c) Lateral Communication
      (d) Barriers to Communication

18.   Match the following :   1

	Column A		Column B
i	Unclarified assumption	A	Psychological barriers
ii	Fear of challenge to authority	B	Semantic barriers
iii	Distrust	C	Organizational barriers
iv	Status	D	Personal barriers

      (a) (i)-(a); (ii)-(b); (iii)-(c); (iv)-(d)   (b) (i)-(b); (ii)-(d); (iii)-(a); (iv)-(c)
      (c) (i)-(c); (ii)-(d); (iii)-(a); (iv)-(b)   (d) (i)-(d); (ii)-(c); (iii)-(b); (iv)-(a)

19.   In management, control is done by :
      (a) Lower level managers   (b) Middle level managers   1
      (c) Top level managers   (d) All level managers.

20.   Controlling and planning are :
      (a) Independent from each other   (b) Interdependent on each other   1
      (c) same   (d) All of the above
                                          Or
      This concept of control in management is based on the belief that if you try to control
      everything you may end up controlling nothing.
      (a) Key result areas   (b) Deviations
      (c) Critical point control   (d) Management by exception

21.   Suman is a well-known businessman in the field of publishing. He owes the success of his   3
      business to his own education in business management and his team of certified
      management consultants. Therefore, he decides to send both his children Sanskar and Sara
      abroad to acquire a degree in business management in their individual area of expertise. He
      feels that all over the world there is marked growth in management as a discipline, but still
      it is not considered to be a full-fledged profession for certain reasons.

      In context of the above case:
      (a) Explain the reasons because of which Suman considers management as a discipline.
      (b) Critically examine the various reasons because of which management is not considered
      to be a full-fledged profession.
                                          Or
      "Management is neither as precise nor as comprehensive as the natural and pure science
      are". Explain.

22.   Name and explain the principles of management which are violated in the following   3
      situations :
      (a) when a worker receives orders from more than one boss.
      (b) when the employee is given responsibility to achieve target production of
          500 units with no authority to access over raw materials.
      (c) when worker is wasting time in search of tool box in the organisation.

23. "Planning helps the organisation to achieve its objectives in a systematic manner." 3
Explain any three points of imortance of Planning.

Or

Inspite of best efforts of managers sometimes planning fails to achieve desired results due to its limitations.
Explain any three points of limitation of planning.

24. Despite internal sources of recruitment being economical, companies sometimes use 3
external source of recruitment.   Compare those two
sources of recruitment on the basis of following points: (i) Economy   (ii)
Quality of personnel   and (iii) Motivation to the staff.

25. It is said that the activities involved in managing an enterprise are common to all kinds of 4
organizations. Two friends, after pursuing MBA from a reputed management institute,
taken up the jobs as per their individual areas of interest at managerial level in different
organizations. One takes up a marketing job in a retail company and strives to increase
sales whereas another joins an NGO and works diligently to realise its objective related to
providing employment to specially abled persons. Both of them have to perform a series of
continuous, composite, but separate functions. On some days, the marketing manager has to
spend more time in planning a future display layout and on another day, she may spend
time in sorting out an employee's problem. They make conscious efforts to build a feeling
of team spirit and coordination among diverse individuals with different needs who work
under them. The effect of their management is noticeable in their respective departments as
the targets are met according to plans, employees are happy and satisfied, and there is
orderliness in its functioning rather than chaos.

In context of the above case: Identify any four features of management highlighted in the
above paragraph by quoting lines from it.

26. Why is the understanding of business environment important for managers? Explain by 4
giving any four reasons.

27. The CEO of Viols Ltd. an automobile enterprise dreams of his company becoming the best 4
player in future. He sets the objectives, forecasts the future and develops various courses
of action to fulfil his dream.
(a) Identify the management function.
(b) Discuss first three steps of its process.

28. Distinguish between delegation and decentralisation (Any four points) 4

Or

Differentiate functional structure with divisional structure.(Any four points)

29. Aryan has set up a small scale manufacturing unit for making different varieties of low cost 4
detergents. In order to market his product he has employed a team of five salesmen. Each
salesman has been assigned specific areas in the city. He holds a meeting every month for
determining the objectives to achieved during the coming month. A sales target is pre-
determined for each month which is mutually agreed by both Aryan and his sales team. If
the salesmen succeeds in reaching that target, a bonus is paid out to all of them along with
the monthly salary.
In context of the above case:
Identify and explain the style of leadership adopted by Aryan by quoting lines from the
paragraph.

Or

William was the chairman and CEO of SRM Steel between the year 2001 and 2010. During

his tenure the company's net worth rose to five times more than the past 10 years. When he retired from the SRM Steel, he received a remarkable payment and it was the largest such payment in history. He once remarked "If you pick the right people and give them the opportunity to spread their wings, and put compensation as a carrier behind it, you almost don't have to manage them." In context of the above case:

(a) Identify the style of leadership he is referring to in the above lines.

(b) State any three features of the style of leadership as identified in part (a) of the question.

30. Sheela is employed as a production manager in a firm. After, undertaking time and motion studies, the daily target of production was fixed at 50 units per day, per worker. However, Lately, Sheela has been struggling to meet this daily target of production. The average daily units produced per worker is 40 units. Sheela, after doing comparative studies and analysis, launched the scheme of extra-incentives to the workers meeting the target production. Gradually, the incentive scheme has started showing positive results.   4

On the basis of the above case, explain the following by taking the points from the process of the last function of management:

(a) Fixing the number of units to be produced as 50 units per day.

(b) The actual average daily units produced i.e.,40 units per worker.

(c) Shortage of 10 units per day per worker.

(d) Recommendation of extra incentives to the worker to meet the target production.

31. Explain the technique of 'Functional Foremanship' and the concept of 'Mental Revolution' as developed by Taylor.   6

Or

Explain the following Principles of management given by Fayol with examples:

(a) Unity of direction

(b) Equity

(c) Esprit de corps

(d) Order

(e) Centralisation and decentralisation

(f) Initiative

32. A company has been registered under the Companies Act,2013 with an authorized share capital of Rs. 2,000 crores. Its registered office is situated in Gujarat and manufacturing unit in Uttrakhand. Its marketing department is situated in Mumbai. The company has collected required paid up capital and about to start manufacturing computers, soaps and textile, the main products of the company.   6

Which type of organizational structure would suit the requirements of such organization? State any three advantages and two limitations of that organization structure.

33. Explain the procedure for selection of employees in an organisation.   6

Or

'No organisation can be successful unless it fills and keeps the various positions filled with the right kind of people for the right job.'   Identify the function of management explain in the above paragraph.   Discuss Five points of importance of that function.

34. Rahim was working in an enterprise on a daily wages basis. It was difficult for him to fulfil the basic needs of his family. His daughter fell ill. He had no money for his daughter's treatment. To meet the expenses of her treatment, he participated in a Motor cycle race and won the prize money. The Motor cycle company offered him a permanent pensionable job which he happily accepted.   6

(a) By quoting lines from the above paragraph, identify the needs of Rahim that are satisfied by the offer of the Motor cycle company.

(b) Also, explain two other needs of Rahim followed by above that are still to be satisfied.

D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

CLASS : XII   **MAXIMUM MARKS : 70**
SUBJECT : COMPUTER SCIENCE (083)   **TIME : 03 HOURS**

General Instructions:

1. *This question paper contains five sections, Section A to E.*
2. *All questions are compulsory.*
3. *Section A has 18 questions carrying 01 mark each.*
4. *Section B has 07 Very Short Answer type questions carrying 02 marks each.*
5. *Section C has 05 Short Answer type questions carrying 03 marks each.*
6. *Section D has 02 questions carrying 04 marks each.*
7. *Section E has 03 questions carrying 05 marks each.*
8. *All programming questions are to be answered using Python Language only*

Section : A

1. For a string S declared as S = 'PYTHON', which of the following is incorrect ?   1
   a) N=len(S)   b) T = S   c) 'T' in S   d) S[0] = 'M'

2. A List is declared as L = ['ONE', 'TWO', 'THREE']   1
   What will be the output of the statement?
   print(max(L))

3. Evaluate the following expression and identify the correct answer.   1
   $$26 - (8 + 2) * 5 + 3**2 * 4$$
   a) 54   b) 46   c) 12   d) 32

4. Find the output of the following code: 1
   ```
   Name="PythoN3.12"
   R=""
   for x in range(len(Name)):
       if Name[x].isupper():
           R=R+Name[x].lower()
       elif Name[x].islower():
           R=R+Name[x].upper()
       elif Name[x].isdigit():
           R=R+Name[x-1]
       else:
           R=R+"#"
   print(R)
   ```
   a) pYThOn##@   b) pYTHOnN#1   c) pYThOn#@   d) pYTHOnN#.1

5. What will be the output of the given expression: **not True and False or True**   1

6. Select the correct output of the code :   1
   ```
   S= "Mid Term EXAM @ 2024"
   A=S.partition (" ")
   print (A)
   ```
   a) ("Mid Term EXAM','@', '2024')   b) ['Mid', 'Term', 'EXAM', '@', '2024']
   c) ('Mid', 'Term EXAM @ 2024')   d) ('Mid', ' ', 'Term EXAM @ 2024')

7. Fill in the blank.   1

    _____ function is used to arrange the elements of a string in ascending order.

    a) asc( )   b) sort( )   c) sorted( )   d) arrange( )

8. What will be the output of the following code?   1

    ```
                import random
                List=["Delhi","Mumbai","Chennai","Kolkata"]
                for y in range(4):
                    x = random.randint(1,3)
                    print(List[x],end="#")
    ```

    a) Delhi#Mumbai#Chennai#Kolkata#   b) Mumbai#Chennai#Kolkata#Mumbai#

    c) Mumbai#Mumbai #Mumbai # Delhi#   d) Mumbai# Mumbai #Chennai # Mumbai

9. Given the following dictionaries   1

    dict_exam={"Exam":"AISSCE", "Year":2025}

    dict_result={"Total":500, "Pass_Marks":165}

    Which statement will merge the contents of both dictionaries?

    a) dict_exam.update(dict_result)   b) dict_exam + dict_result

    c) dict_exam.add(dict_result)   d) dict_exam.merge(dict_result)

10. What will be the output of the following code?   1

    ```
                def my_func(var1=100, var2=200):
                    var1+=10
                    var2 = var2 - 10
                    return var1+ var2
                print(my_func(50), my_func( ))
    ```

    a) 250 75   b) 250 300   c) 100 200   d) 150 300

11. Suppose content of 'Myfile.txt' is "**Computer Science with PYTHON**"   1

    What will be the output of the following code?

    ```
                myfile = open("Myfile.txt")
                vlist = list("aeiou")
                vc=0
                x = myfile.read( )
                for y in x:
                   if(y in vlist):
                      vc+=1
                print(vc)
                myfile.close( )
    ```

    a) 6   b) 7   c) 8   d) 9

12. Assume the content of text file, 'student.txt' is: 1

    > **Sanjiv Roy**
    > **Richa Ghosh**
    > **Rajen Mondal**
    > **Kiran Rao**

    What will be the data type of data_rec after executing the following code?

```
myfile = open("Myfile.txt")
data_rec = myfile.readlines()
myfile.close()
```

    a) String   b) Tuples   c) List   d) Dictionary

13. Which of the following is true for file objects in text mode?   1
    a) They handle the end-of-line character automatically
    b) They do not handle the end-of-line character
    c) They can read binary data
    d) They can write binary data

14. Which of the following is not a valid DML command in SQL?   1
    a) INSERT   b) UPDATE   c) ALTER   d) DELETE

15. Which SQL clause is used to sort the result set in ascending or descending order?   1
    a) ORDER BY   b) SORT BY   c) ASCEND BY   d) ARRANGE BY

16. Which of the following SQL queries will correctly count the number of unique departments in   1
the 'employees' table?
    a) SELECT COUNT(department) FROM employees;
    b) SELECT COUNT(DISTINCT department) FROM employees;
    c) SELECT COUNT(UNIQUE department) FROM employees;
    d) SELECT COUNT(DISTINCT ALL department) FROM employees;

Q. 17 & Q. 18 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*

17. **Assertion(A):** In Python, List and Tuples are defined as an ordered sequence of elements having   1
data of same or different types.
Reason (R): The list elements are separated by commas and enclosed within [] brackets
whereas, the tuple elements are separated by commas and enclosed within() parentheses.

18. **Assertion (A):** If the arguments in function call statement match the number and order of   1
arguments as defined in the function definition, such arguments are called positional arguments.
Reason (R): During a function call, the argument list first contains default argument(s) followed
by positional argument(s).

Section : B

19. The code given below accepts a number as an argument and returns the reverse number.   2
Observe the following code carefully and rewrite it after removing all syntax and logical errors.
Underline all the corrections made.

```
define revNumber(num):
        rev = 0
        rem = 0
        While num > 0:
                rem = = num % 10
                rev = rem * 10 + rev
                num = num / 10
        return rev
print(revNumber(1234))
```

20. Differentiate between actual parameter(s) and a formal parameter(s) with a suitable example for each.   2

OR

Differentiate between Positional Argument and Default Argument of function in python with suitable example

21. Write a function lenWords(STRING), that takes a string as an argument and returns a tuple containing length of each word of a string.   2

For example, if the string is "Come let us have some fun", the

tuple will have (4, 3, 2, 4, 4, 3)

22. Write the Python statement for each of the following tasks using BUILT-IN functions / methods only: 2

a) To insert an element 200 at the third position, in the list L1.

b) To change the first character of the string in capital letter.

OR

A list named studentAge stores age of students of a class. Write the Python command to import the required module and (using built-in function) to display the most common age value from the given list.

23. Observe the following code and answer the questions that follow: 2

File = open("Mydata","a")
_____ #Blank1
File.close()

a) What type (Text/Binary) of file is Mydata? Explain your answer.

b) Fill the Blank1 with statement to write "ABC" in the file "Mydata"

OR

Write a function countmy( ) in Python to read file Data.txt and count the number of times "my" occur in file.

For example, if the file contain:

   This is my website. I have displayed my preferences in the choice section.

Output :

   The countmy( ) function should display the output as : 'my' occurs 2 times.

24. What are aggregate functions in SQL? Give examples?   2

OR

What do you mean by Equi-join and Natural join?

25. An organization SoftSolutions is considering to maintain their employees records using SQL to store the data. As a database administer, Murthy has decided that :   2

- The attributes of the table HRDATA are as follows:
  - ➢ ECode – Numeric (Primary Key)
  - ➢ EName – Character of size 30 (Cannot be empty)
  - ➢ Desig – Character of size 15 (Default value is 'Admin')
  - ➢ Remn – Numeric

a) Write a SQL command to create the table HRDATA with appropriate constraints.

b) Write command to insert following data in the table:

ECode = 80015, Ename = "Allen" Remn = 43000

Section : C

26. Write a function mergeList(L1,L2) which takes two lists as argument and create a third list with common elements from both the lists (without duplicates) in ascending order. Make sure your program works on two lists of different sizes. 3

e.g.

L1= [1,1,5,3,2,8,55,21,34,13,89]

L2= [20,1,2,3,4,5,6,7,8,9,10,11,12,13]

The output should be: [1,2,3,5,8,13]

27. Write the output of the following Python program code: 3

```
def ChangeList():
        L=[ ]
        L1=[ ]
        L2=[ ]
        for i in range(1,10):
                L.append(i)
        for i in range(10,1,-2):
                L1.append(i)
        for i in range(len(L1)):
                L2.append(L1[i]+L[i])
        L2.append(len(L)-len(L1))
        print(L2)
ChangeList( )
```

28. Write a function countH( ) in python that displays the number of lines starting with 'H' from the file "para.txt". 3

Example, if the file contains:

> ***Whose woods these are I think I know.***
> ***His house is in the village though.***
> ***He will not see me stopping here.***
> ***To watch his woods fill up with snow.***

Output : The lines starting with 'H' = 2.

OR

Write a method/function DISPLAYWORDS() in python to read lines from a text file STORY.TXT, and display those words, which are less than 4 characters.

29. a) Define Serialization. 3

b) A binary file "emp.DAT" has structure (EID, Ename,designation,salary). Write a function addemp() to write three more records of employes in existing file emp.dat. (The details of the employees must be taken as input from the user.)

30. Write the output of the queries (i) to (iii) based on the table, TECH_COURSE given below: 3

Table: TECH_COURSE

CID	CNAME	FEES	START_DATE	TID
C201	Animation and VFX	12000	2022-07-02	101
C202	CADD	15000	2021-11-15	NULL
C203	DCA	10000	2020-10-01	102
C204	DDTP	9000	2021-09-15	104
C205	Mobile Application	18000	2022-11-01	101
C206	Digital Marketting	16000	2022-07-25	103

i) SELECT DISTINCT TID FROM TECH_COURSE;

ii) SELECT TID, COUNT(*), MIN(FEES) FROM TECH_COURSE GROUP BY TID HAVING COUNT(TID)>1;

iii) SELECT CNAME FROM TECH_COURSE WHERE FEES>15000 ORDER BY CNAME;

Section : D

31. Consider a CSV file 'INVENTORY.CSV' that stores information about products using the structure [ProductID, ProductName, Quantity, Price].   4
Write the following Python functions for different operations.
addProduct(): To write the product details in the file (Minimum 3 products)
expensiveProducts(): To read the contents of 'INVENTORY.CSV' and display details of products with a price higher than Rs. 1000. Additionally, calculate and display the sum of such expensive products.

For example: If the file stores the following data in binary format
[1, 'ABC', 100, 5000]
[2, 'DEF', 250, 1000]
[3, 'GHI', 300, 2000]
then the function should display
Product ID: 1, 'ABC', 100, 5000
Product ID: 3, 'GHI', 300, 2000
Total expensive products: 7000

32. Asim creates a table RESULT with a set of records to maintain the marks secured by students in Sem 1, Sem 2, Sem 3 and their division. After creation of the table, he has entered data of 7 students in the table.   4

Table: **RESULT**

ROLL_NO	SNAME	SEM1	SEM2	SEM3	DIVISION
101	KARAN	366	410	402	I
102	NAMAN	300	350	325	I
103	ISHA	400	410	415	I
104	RENU	350	357	415	I
105	ARPIT	100	75	178	IV
106	SABINA	100	205	217	II
107	NEELAM	470	450	471	I

Based on the data given above answer the following questions:

i) Identify the most appropriate column, which can be considered as Primary Key. Give appropriate reason.

ii) If two columns are added and 2 rows are deleted from the table RESULT, what will be the new degree and cardinality of the above table?

iii) Increase the SEM2 marks of the students by 3% whose name begins with 'N'.

iv) Add a column REMARKS in the table with datatype as varchar with 50 characters.

Section : E

33. a) Find the output for the following codes given below: 2+3=5

```
def func(b):
        global x
        print('Global x=', x)
        y = x+b
        x = 7
        z = x-b
        print('Local x = ',x)
        print('y = ',y)
        print('z = ',z)
x=5
func(10)
```

b) Write a function fes_count(Festival) in Python, that takes the dictionary, festival as an argument and displays the names (in lowercase) of the places whose names are longer than 10 characters.

For example, Consider the following dictionary

Festival={1:"Holi",2:"ID-ul-Fiter",3:"Christmas",4:"Diwali",5:"Pongal"}

The output should be: id-ul-fiter

OR

a) What will be the output of the following program:

```
Msg="hALFyEARLY_Exam @2024"
Msg1="
for i in range(0,len(Msg)):
        if Msg[i].isupper():
                Msg1=Msg1+Msg[i].lower()
        elif i%5==0:
                Msg1=Msg1+'$'
        else:
                Msg1=Msg1+Msg[i].upper()
print(Msg1)
```

b) Write a function swapList() which accepts a list as argument and swap the content which is divisible by 7 with the next value. (use the same list to modify. Don't use 2nd list)

Ex: List: 3, 21, 5, 6, 14, 8, 14, 3

Resultant List: 3, 5, 21, 6, 8, 14, 3, 14

34. a) Differentiate between r+ and w+ file modes in Python. 2+3=5

b) Consider a file, SPORT.DAT, containing records of the following structure:

   [SportName, TeamName, No_Players]

Write a function, copyData(), that reads contents from the file SPORT.DAT and copies the records with Sport name as "Basket Ball" to the file named BASKET.DAT. The function should return the total number of records copied to the file BASKET.DAT.

OR

a) How are text files different from binary files?

b) A Binary file, CINEMA.DAT has the following structure:

   {MNO:[MNAME, MTYPE]}

Where, MNO – Movie Number, MNAME – Movie Name, MTYPE is Movie Type

Write a user defined function, findType(mtype), that accepts mtype as parameter and displays all the records from the binary file CINEMA.DAT, that have the value of Movie Type as mtype.

35. a) Give one difference between alternate key and candidate key. 2+3=5

b) Sartaj has created a table named Student in MYSQL database, SCHOOL with following columns:

   ☐ rno (Roll number)- integer
   ☐ name (Name) - string
   ☐ DOB (Date of birth) – Date
   ☐ Fee – float

Note the following to establish connectivity between Python and MySQL:

   ☐ Username - root   ☐ Password – tiger   ☐ Host – localhost

Sartaj, now wants to display the records of students whose fee is more than 5000. Write the function to help Sartaj to perform the above task.

****

DAV INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

CLASS- XII   **M.M- 60 MARKS**
SUB- COST ACCOUNTING (823)   **TIME- 3HRS.**

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of 24 questions in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. Out of the given (6 + 18 =) 24 questions, a candidate has to answer (6 + 11 = 17) questions in the allotted (maximum) time of 3 hours.
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**
   i. This section has 06 questions.
   ii. There is no negative marking.
   iii. Do as per the instructions given.
   iv. Marks allotted are mentioned against each question/part.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):**
   i. This section contains 18 questions.
   ii. A candidate has to do 11 questions.
   iii. Do as per the instructions given.
   iv. Marks allotted are mentioned against each question/part

SECTION A: OBJECTIVE TYPE QUESTIONS

Q. 1 **Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**

i) Choose the correct Stages of active listening.   1
   a) Receiving – Remembering – Understanding – Evaluating – Responding
   b) Receiving – Understanding – Evaluating –Remembering –Responding
   c) Receiving – Evaluating – Understanding – Remembering –Responding
   d) Receiving – Understanding – Remembering – Evaluating – Responding

ii) What are the characteristics of an ideal message?   1
   a) Clear   b) Concise
   c) Accurate   d) All of the above

iii) Which of the following can be a barrier to active listening?   1
   a) Noisy environment
   b) Not maintaining an eye contact with the speaker
   c) Not being attentive
   d) All of the above

iv) Self-management, which is also referred to as _____ is the ability to control one's emotions, thoughts and behaviour effectively in different situations.   1
   a) self – innovative   b) self – control
   c) self – design   d) self – perform

v) Motivation is derived from the word _____.   1
   a) motion   b) motivation
   c) motivator   d) motive

vi) What is the full form of FFM?   1
   a) Five Factor Model   b) Five Factor Module
   c) Fixed Factor Model   d) Fixed Factor Module

Q. 2 **Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)**

i) Prime cost is not called as: 1
   a) Direct Cost   b) Basic Cost
   c) Float Cost   d) Flat Cost

ii) Factory Cost is the summation of   1

a) Prime cost and Office overheads   b) Office cost and Office overheads

c) Prime cost and Factory overheads   d) Office cost and selling overheads

iii) Factory cost is not known as   1

a) Work Cost   b) Industrial Cost

c) Manufacturing Cost   d) Production Cost

iv) Total cost is also known as   1

a) Cost of production   b) Cost of manufacturing

c) Cost of sales   d) None of the above

v) The presentation of production statement is generally made in an account form which is   1
called as _____.

vi) Sales traveller's wages is a part of _____ overhead cost.   1

vii) Presentation of production account is made in a _____ form.   1

Q. 3 Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)

i) Output costing helps in arriving at the final _____ price for marketers.   1

a) Cost   b) Selling

c) Purchase   d) Gross

ii) Which account would be debited in recording a materials requisition for direct materials?   1

a) Raw Materials Inventory   b) Factory Overhead

c) Raw Materials Purchases   d) Goods in Process Inventory

iii) Computation method of Economic Batch Quantity is based on the principle of _____.   1

a) Economy in purchasing   b) Minimum handling cost and time

c) Economic Order Quantity   d) Re-Order period

iv) What is Job Costing?   1

v) What is Batch Costing?   1

vi) What is Job Ticket?   1

vii) What is the use of 'Wage Abstract'?   1

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

i) Batch costing procedure is similar to _____ procedure.   1

a) contract costing   b) job costing

c) process costing   d) marginal costing

ii) Batch Costing also known as _____.   1

a) Single Costing   b) Lot Costing

c) Unit Costing   d) Numbers Costing

iii) Contract is a special form of job costing also known as_____.   1

iv) State the amount to be paid by the contractee to the contractor.   1

v) What is Cost plus Contracts?   1

vi) Define the term Work Uncertified.   1

Q. 5 Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)

i) The balance of money not paid by contractee is known as _____ .   1

ii) In the balance sheet the contractee's account is shown on the _____ side.   1

iii) The total profit made on completed contracts may be taken safely to the _____ of   1
Profit and Loss Account.

iv) The accounting entry for the transfer of profit to the profit and loss account and Work-in-Progress account for unrealised profit will be:

a) Contract A/c (with total profit)   Dr.
       To Profit and Loss A/c (with profit transferred)
       To Work-in-Progress A/c (with profit kept as reserve)

b) Contractee A/c (with total profit)   Dr.
       To Profit and Loss A/c (with profit transferred)
       To Work-in-Progress A/c (with profit kept as reserve)

c) Contract A/c   Dr.
       To Profit and Loss A/c

d) Profit and Loss A/c (with profit transferred)   Dr.
     Work-in-Progress A/c (with profit kept as reserve)   Dr.
          To   Contract A/c (with total profit)

1

v) The cost per unit is the _____ which is calculated by dividing the total process cost by number of units produced in that particular process.
a) Average cost
b) total cost
c) Gross total cost
d) Net total cost

1

vi) Process costing is employed in businesses which involve _____ where the product moves in the production line through a same process or set of processes each distinct and well defined.

1

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

i) The processing of raw materials leads to the production of several such products may be _____ or _____ .
a) main product, wastage product
b) joint products, by products
c) finished product, semi-finished product
d) none of the above

1

ii) Process costing is used in the business where the products are _____ .
a) disparate   b) various
c) homogeneous   d) distinct

1

iii) Which one of the following principles is not to be followed in process costing to ascertain the cost?
a) All the production activities are classified by processes and each process or department includes number of operations which are not separately measurable.
b) All the direct and indirect costs that relate to a particular process are debited to that process account.
c) The cost per unit is computed by dividing the total material cost by number of units produced in that particular process.
d) The operations are in a sequence which is specific and predetermined.

1

iv) What is Normal Process Loss?   1
v) What is Abnormal Process Loss?   1
vi) What is By-Products?   1

SECTION B: SUBJECTIVE TYPE QUESTIONS
Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks) Answer each question in 20 – 30 words.

Q. 7 Write a short note about Active listening.   2
Q. 8 Explain any two Elements of communication.   2

Q. 9	How can the barriers of the following two factors be overcome? Q) Being pre-occupied ii) Noise and visual distractions	2
Q. 10	Differentiate between intrinsic and extrinsic motivation.	2
Q. 11	Explain the meaning of Personality and personality traits.	2

Answer any 3 out of the given 5 questions in 20 – 30 words each (2 x 3 = 6 marks)

Q. 12	Calculate the cost of production from the following data: Prime cost Rs.45.400, Factory cost Rs.52,600, Office overheads Rs.12,500, Opening stock of finished goods Rs.1,000, Closing stock of finished goods Rs.1,500 and Salesman's salary Rs.5,000.	2
Q. 13	Explain any two Features of Job Costing.	2
Q. 14	Explain any two Objectives of Job Costing.	2
Q. 15	Pass the Journal Entries from the following information. The value of work certified is Rs.50,000 and contractee has paid 80% in cash.	2
Q. 16	What is Process Losses and Wastages?	2

Answer any 2 out of the given 3 questions in 30– 50 words each (3 x 2 = 6 marks)

Q. 17	Explain any three Components of Cost.	3
Q. 18	A Cloth Manufacturing company is having annual demand of its medicine 10,000 units. For the production of units, company has to bear setting up and order processing cost of Rs. 150. Cost of manufacturing one unit is Rs. 1,500. Cost of carrying is 5% per annum. Calculate Economic Batch Quantity.	3
Q. 19	i) Notional Profit Rs.79,000; Cash Received Rs.3,30,000; Work Certified Rs.4,00,000; Contract Price Rs.6,00,000. Calculate profit that can be credited to the P&L A/c ii) How much profit if any you would allow to be considered in the following case? Contract Cost Rs. 5,60,000; Contract Value Rs. 10,00,000; Cash Received Rs. 5,40,000; Uncertified Work Rs. 60,000. Deduction from bills by way of security deposit 10%.	3

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

Q. 20	Explain the treatment of Work-in-Progress and Finished goods in the Cost Sheet.	4
Q. 21	Explain the first four steps required in Job Costing.	4
Q. 22	Mr. A has undertaken several contract works. He maintains a separate record for each contract. From the records for the year ending 31/03/2023, prepare contract account for Contract No.50 and find the amount transferred to profit and loss account.	4

	Rs.
Direct purchase of material	90,000
Material issued from stores	25,000
Wages	1,22,000
Direct expenses	12,000
Machinery purchased	80,000
Establishment charges	27,000

The contract price was Rs. 7,50,000. Cash received up to 31/03/2023 was Rs. 3,00,000 which is 80% of work certified. Material at site Rs. 8,000. Depreciation for Machine Rs. 8,000.

Q. 23	Distinguish between Job Costing and Contract Costing (any four).	4
Q. 24	2,000 units of raw material were introduced in a process at a cost of Rs. 8,000. The normal wastage allowed is 10%, each unit of waste realizes Rs. 2.5. The actual production was 1,700 units (with abnormal wastage of 100 units). The expenses being as follows: Direct wages Rs. 13,000 Indirect expenses Rs. 6,500 Prepare the process account to show the effect of wastage.	4

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D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION – 2024-2025

CLASS – XII   MAX. MARKS - 80
SUBJECT - ECONOMICS   TIME - 3 HOURS

General Instructions:
1. This question paper contains two parts: -
Part A –Macroeconomics
Part B – Indian Economic Development
2. This paper contains 20 Multiple Choice Questions of 1 mark each.
3. This papercontains4 Short Answer Questions of 3 marks each to be answered in 60 to 80 words.
4. This paper contains 6 Short Answer Questions of 4 marks each to be answered in 80 to 100 words.
5. This paper contains 3 Long Answer Questions of 6 marks each to be answered in 100 to 150 words.
6. This paper contains 1Case Based Question of 6 marks, to be answered in 100 to 150 words.

PART A –MACROECONOMICS

1.   **Read the following statements carefully:**   1

     Statement 1: Economic territory and political frontier of a nation are one and the same thing.
     Statement 2: American Embassy in India is a part of the economic territory of India.

     In the light of the given statements, 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.
     D. Both statements 1 and 2 are false.

2.   The difference between national income and domestic income is that of: 1
     A. Net Indirect Taxes   B. Net Factor Income from Abroad
     C. Both (A) and (B)   D. Consumption of fixed capital

3.   Find the missing figures marked as (i),(ii),(iii) and (iv) and choose the correct alternative: 1

Round	Deposits	Loans (80%)	Reserve Ratio (20%)
I	5000	4000	..(i)..
II	4000	..(ii)..	800
...	...	...	...
...	...	...	...
Total	..(iii)..	..(iv)..	5000

Alternatives:
A.1000, 800, 20000, 25000.   B.5000, 3200, 25000, 20000.
C.1000, 3200, 25000, 20000.   D. 1000, 800, 20000, 25000.

4. **Read the following statements carefully:**   1
   Statement 1: Money supply (M₁) in India does not include 'demand deposits' with commercial banks.
   Statement 2: Money supply refers to the stock of money held by public during a particular period of time.
   In the light of the given statements, choose the correct alternative.
   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.
   D. Both statements 1 and 2 are false.

5. If the central bank wants to reduce money supply in the economy, it may _____.   1
   (Choose the correct alternative to fill up the blank).
      i.   Increase Bank Rate.
      ii.   Reduce Cash Reserve Ratio.
      iii.   Sell securities in the open market.
      iv.   Buy securities in the open market.
   Alternatives:
   A. (i) and (iii).   B. (ii), (iii) and (iv).
   C. (i), (iii) and (iv).   D. (i), (ii), (iii) and (iv).

6. Two statements are given as Assertion(A) and Reason(R). Read them and choose the correct   1
   alternative from the ones given below:
   Assertion(A): Undistributed profits are not a part of domestic factor income.
   Reason (R): Undistributed profits are actually retained earnings of the firms.
   A. Both Assertion(A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion(A).
   B. Both Assertion(A) and Reason(R) are true and Reason(R) is not the correct explanation of Assertion(A).
   C. Assertion(A) is true and Reason(R) is false.
   D. Assertion(A) is false but Reason(R) is true.

7. Gross Domestic Capital Formation =   1
   i) Gross Domestic fixed capital formation+ Change in Stock
   ii) Net domestic capital formation + Deprecation
   iii) Net Domestic fixed capital Formation+ Depreciation + Change in stock
   A. Only (i) is correct and (ii) & (iii) are wrong.
   B. Only (ii) is correct and (i) & (iii) are wrong.
   C. Only (iii) is correct and (ii) & (ii) are wrong.
   D. (i), (ii) & (iii) all are correct.

8. Two statements are given as Assertion(A) and Reason(R). Read them and choose the correct   1
   alternative from the ones given below:
   Assertion(A): Real GDP is a better index of economic growth than the Nominal GDP.
   Reason (R): The index of real GDP always reflects a change due to rise in the price level.
   A. Both Assertion(A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion(A).
   B. Both Assertion(A) and Reason(R) are true and Reason(R) is not the correct explanation of Assertion(A).
   C. Assertion(A) is true and Reason(R) is false.
   D. Assertion(A) is false but Reason(R) is true.

9. Two statements are given as Assertion(A) and Reason(R). Read them and choose the correct alternative from the ones given below: **1**
Assertion(A): Central bank provides 'Clearing House facility' to the commercial banks.
Reason (R): Central bank accepts deposits from the commercial banks and offers them loan.
   A. Both Assertion(A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion(A).
   B. Both Assertion(A) and Reason(R) are true and Reason(R) is not the correct explanation of Assertion(A).
   C. Assertion(A) is true and Reason(R) is false.
   D. Assertion(A) is false but Reason(R) is true.

10. Two statements are given as Assertion(A) and Reason(R). Read them and choose the correct alternative from the ones given below: **1**
Assertion (A): To control inflation the Central Bank increases SLR in the economy.
Reason (R): A higher SLR reduces the lending ability of commercial Banks.
   A. Both Assertion(A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion(A).
   B. Both Assertion(A) and Reason(R) are true and Reason(R) is not the correct explanation of Assertion(A).
   C. Assertion(A) is true and Reason(R) is false.
   D. Assertion(A) is false but Reason(R) is true.

11. Explain why every capital good is considered a producer good, but not all producer goods can be classified as capital goods. Use examples in your explanation. **3**

12. Should following be treated as normal resident of India? Give reason for your answer. **3**
   i. Foreigner working in Indian embassy in U.S.A
   ii. Indian working in Asian Development Bank in Philippines.
   iii. Indian student doing PHD from an university in USA and living there for five years.

OR

Analyse how the growing sales of petrol and diesel cars in large cities affect the Gross Domestic Product (GDP) and welfare. Is there a positive link between GDP and welfare in this context?

13. Classify the following goods into intermediate goods and final goods with reason **4**

   i. Milk purchased by a household.
   ii. Purchase of rice by a grocery shop.
   iii. Purchase of an air conditioner for use in shop.
   iv. Cloth used for making a sofa-set by the carpenter.

14. State when: **4**

   i. Domestic factor income will be equal to Net National Product at factor cost?
   ii. National income at market price is less than National income at Factor cost?
   iii. $GDP_{MP} = NDP_{MP}$?
   iv. Gross value of output at Market price = Gross value added at Market price.
OR
Fill in the blanks:
i) GNP_{MP} = _____ + Depreciation + NFIA
ii) COE+Rent+Interest+Profit+Royalty+Depreciation=_____
iii) If $GDP_{FC} > GNP_{FC}$, then NFIA is _____ (positive/negative).
iv) When _____ rises, it is because the total production in the economy has definitely risen.

(Nominal GDP/Real GDP)

15. Will the following factor incomes be included in domestic factor income of India? Give reasons for your answer. **1×4=4**

    i.   Compensation of employees to the residents of Japan working in Indian embassy in Japan.
    ii.   Profits earned by a branch of foreign bank in India.
    iii. Rent received by an Indian resident from Russian embassy in India.
    iv. Profit earned by a branch of State Bank of India in England.

16. I.A) From the following data, calculate the value of Gross National Product at Factor Cost **4+2=6**
(GNP_{FC}).

S.No.	Items	Amount in (₹Crores)
(i)	Compensation of Employees	12,000
(ii)	Rent and Interest	1,800
(iii)	Inventory investment	100
(iv)	Profits	1,500
(v)	Gross fixed investment	3,000
(vi)	Net investment	2000
(vii)	Net Factor Income from Abroad	(-)120
(viii)	Mixed Income of Self Employed	1,300

B) Identify the factor services required to earn the following types of factor income:
i) Rent.
ii) Royalty
iii) Profit.
iv) Interest.

<div align="center">OR</div>

II. A) Calculate the value of 'Net Value Added at Factor Cost' (NVA_{FC}) using the given data:

S.no.	Items	Amount in (₹'000)
(i)	Sale of Rice in the market	580
(ii)	Purchase of Tractor and Thrasher	400
(iii)	Procurement of Rice by the government	20
(iv)	Self-Consumption of Rice during the year	15
(v)	Expenditure on running and maintenance of Tractor and Thrasher	20
(vi)	Fertilizer subsidies received from the government	3

B) Explain any three precautions that should be taken while estimating national income by expenditure method.

17. A. How do open market operations (OMOs) assist the Reserve Bank of India (RBI) in regulating **3+3=6**
the money supply and credit creation in the economy?

B. "To boost falling demand in the economy, the Reserve Bank of India reduced Reverse Repo rate." Elaborate the rationale behind the steps taken by the Central Bank.

PART B –INDIAN ECONOMIC DEVELOPMENT

18. Arrange the following event in the correct chronological order. Choose the correct arrangements.　　1
    i.　　The year of great divide
    ii.　　Establishment of Tata Iron and Steel Company
    iii.　　Introduction of Railways in India by the British
    iv.　　Opening of Suez Canal
    A. iv,ii,i,iii
    B. i,iv,iii,ii
    C. ii,iii,iv,i
    D. iii,iv,ii,i

19. **Read the following statements carefully:**　　1

    Statement 1: According to IPR 1956 public sector was to play a key role in Industrialization.
    Statement 2: The Industrial Resolution of 1956 allowed private sector to take part in industrialization however under the rule of licensing.

    In the light of the given statements, choose the correct alternative.

    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.
    D. Both statements 1 and 2 are false.

20. Which of the following is not a trade and investment policy reform initiated in India under NEP-1991?　　1
    A. Removal of export duties
    B. Dismantling of quantitative restrictions.
    C. Increase in tariff rate.
    D. Removing the import licensing.

21. **Identify the incorrect statement from the following:**　　1
    A. Devaluation is expected to trigger the flow of foreign exchange into the domestic economy.
    B. Reduction in tariff and non-tariff barriers reduces global competition.
    C. Policy of liberalization inspired a shift in the role of RBI from regulator to facilitator.
    D. There has been a substantial jump in FDI owing to removal of trade barriers.

22. Two statements are given as Assertion(A) and Reason(R). Read them and choose the correct alternative from the ones given below:　　1
    Assertion (A): Britishers followed the policy of systematic de-industrialization in India.
    Reason (R): Britishers wanted to turn India into a feeder economy turning it into exporter of raw materials and importer of finished goods.
    A. Both Assertion(A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion(A).
    B. Both Assertion(A) and Reason(R) are true and Reason(R) is not the correct explanation of Assertion(A).
    C. Assertion(A) is true and Reason(R) is false.
    D. Assertion(A) is false but Reason(R) is true.

23. Identify which of the following does not reflect a direct relationship between human capital formation and economic growth.   **1**

    A. Employability of an educated person is higher than that of an uneducated person.
    B. On-the-job training will reduce the skills of labour.
    C. Healthy workforce is a boon to the economy.
    D. Digital information helps in taking real time decisions.

24. Two statements are given as Assertion(A) and Reason(R). Read them and choose the correct   **1**
    alternative from the ones given below:
    Assertion (A): During mid 60s -70s the scope of Green Revolution was restricted to affluent areas of the country.
    Reason (R): It was owing to intervention by the Govt. that the benefits of Green Revolution accrued to small farmers as well.
    A. Both Assertion(A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion(A).
    B. Both Assertion(A) and Reason(R) are true and Reason(R) is not the correct explanation of Assertion(A).
    C. Assertion(A) is true and Reason(R) is false.
    D. Assertion(A) is false but Reason(R) is true.

25. Two statements are given as Assertion(A) and Reason(R). Read them and choose the correct   **1**
    alternative from the ones given below:
    Assertion (A): GST ensures uniformity of tax rates across all states.
    Reason (R): All types of direct and indirect taxes have been subsumed by it.
    A. Both Assertion(A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion(A).
    B. Both Assertion(A) and Reason(R) are true and Reason(R) is not the correct explanation of Assertion(A).
    C. Assertion(A) is true and Reason(R) is false.
    D. Assertion(A) is false but Reason(R) is true.

26. Two statements are given as Assertion(A) and Reason(R). Read them and choose the correct   **1**
    alternative from the ones given below:
    Assertion (A): Human capital is not traded in the market; however, its services are traded.
    Reason (R): Human capital is intangible in nature.
    A. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
    B. Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).
    C. Assertion (A) is true, but Reason (R) is false.
    D. Assertion (A) is false, but Reason (R) is true.

27. Look at the picture given below and identify the non-farm area of employment this person is involved in? **1**

Options:

A. Animal Husbandry.
B. Dairying.
C. Fisheries.
D. Horticulture.

28. While subsidies encourage farmer to use new technology, they are a huge burden on government finances. Discuss the usefulness of subsidies in the light of this fact. **3**

29. "Some economists believe that the economic reforms have adversely affected the agriculture sector in India." Do you agree with the given statement? Justify your answer with valid reason. **3**

<p align="center">OR</p>

a) Name any one Maharatna company.
b) Why did government start granting 'Navaratnas/Maharatna' status to PSU's.

30. **As a result of Globalization outsourcing has become an important economic activity and India has emerged as a favourite outsourcing destination for many developed countries.** **1+2+2 =4**
a) State the meaning of the term outsourcing.
b) Give example of any two services which can be outsourced.
c) What are the advantages that make India a favourite outsourcing destination.

31. a) **Despite the growth in educational expenditure in India over the year it is strongly argued that the result is far from what was desired.** **2+2=4**
Justify the statement by giving any two reasons.

b) Bring out the need for on-the-job training for a person.

<p align="center">OR</p>

a) Education is considered an important input for development of a nation. How?
b) In your view, why is it essential for the government to intervene and regulate the activities of education and health care institutions in India?

32. Critically appraise the shortfalls of the industrial policy pursued by the British colonial administration. **4**

33. a) State the objectives of the land reform and also mention the factors that led to its ineffective implementation across the country   **4+2=6**

b) Why was public sector given a leading role in industrial development during the planning period?

<div align="center">

OR

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a) Why and how was private sector regulated under the IPR 1956?

b) What led to permit license raj in India?

34. According to a recent report published in 2024 by the Agricultural Marketing Department, the adoption of comprehensive measures has significantly enhanced agricultural marketing in recent years. The extension of storage facilities at the farm level and the establishment of modern storage and warehousing facilities in markets and consumption centers have reduced post-harvest losses by 30%, ensuring a steady supply of produce. In fact, a recent news article highlighted that the government has set up 100 new warehouses in the past year alone, increasing storage capacity by 50% (The Hindu, 2024).   **2+4=6**

The establishment of regulated markets has promoted transparent trading practices, with 80% of markets now using electronic trading platforms (Financial Express, 2024). Improved transport facilities between villages and mandis have facilitated smoother movement of goods, reducing transportation costs by 25% (Indian Express, 2024). Moreover, the establishment of co-operative marketing societies has empowered farmers to negotiate better prices and access new markets, with 50% of farmers now part of these societies (Times of India, 2024).

Access to cheap credit, particularly from institutional sources, has further enabled farmers to invest in their operations and improve productivity. In fact, the government has launched a new credit scheme, providing loans at 4% interest to farmers (Business Standard, 2024). The introduction of grading systems has ensured that consumers receive high-quality produce, while producers receive better prices for their products. Furthermore, timely access to market information has enabled stakeholders to make informed decisions, responding to demand and supply dynamics effectively.

Overall, these measures have collectively contributed to a more efficient, transparent and profitable agricultural marketing system, benefiting both farmers and consumers alike. The government's commitment to continuing these initiatives has been reinforced by the recent announcement of a new agricultural marketing policy, aiming to double farmers' incomes by 2027 (PTI, 2024). With the continued implementation of these measures, the future of agricultural marketing looks bright, with increased opportunities for farmers, traders, and consumers.

On the basis of the given text and common understanding answer the following questions:

a) As the report has highlighted on emerging alternate marketing channels such as regulated market and mandis, can you therefore give four examples of any such channels operating across different states in India?

b) In the light of above media report discuss four such measures that were initiated to improve the marketing aspect in Agriculture.

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D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

CLASS : XII   **MAXIMUM MARKS : 80**
SUBJECT : ENGLISH CORE   **TIME : 3 HOURS**

General Instructions:

1. The Question Paper contains THREE sections-READING, WRITING and LITERATURE.

2. Attempt questions based on specific instructions for each part/section.

3. The Question Paper consists of 08 printed pages with 13 questions.

SECTION A : READING SKILLS (22 marks)

1.   **Read the following passage.**   12

The public distribution system, which provides food at low prices, is a subject of vital concern. There is growing realisation that though India has enough food to feed its masses two square meals a day, the monster of starvation and food insecurity continues to haunt the poor in our country.

Increasing the purchasing power of the poor through providing productive employment leading to rising income, and thus good standard of living is the ultimate objective of public policy. However, till then there is a need to provide assured supply of food through a restructured, more efficient and decentralized public distribution system (PDS).

Although the PDS is extensive-it is one of the largest such systems in the world-it has yet to reach the rural poor and the far off places. It remains an urban phenomenon, with the majority of the rural poor still out of its reach due to lack of economic and physical access. The poorest in the cities and the migrants are left out for they generally do not possess ration cards. The allocation of PDS supplies in big cities is larger than in rural areas. In view of such deficiency in the system, the PDS urgently needs to be streamlined. Also, considering the large food grains production combined with food subsidy on one hand and the continuing slow starvation and dismal poverty of the rural population on the other hand, there is a strong case for making PDS target group oriented.

The growing salaried class is provided job security, regular income and social security. It enjoys almost 100% insulation against inflation. These gains of development have not percolated down to the vast majority of our working population. If one compares only dearness allowance to the employees in public and private sector and looks at its growth in the past few years, the rising food subsidy is insignificant to the point of inequity. The food subsidy is a kind of DA to the poor, the self-employed and those in the unorganised sector of the economy. However, what is most unfortunate is that out of the large budget of the so-called food subsidy, the major part of it is administrative cost and wastages. A small portion of the above budget goes to the real consumer and even lesser portion to the poor in real need.

It is true that subsidies should not become a permanent feature, except for the destitute, disabled, widows and the old. It is also true that subsidies often create psychology of dependence and hence is habit-forming killing the general initiative of the people. By making PDS target group oriented, not only the poorest and neediest would be reached without additional cost but it will actually cut overall cost incurred on large cities and for better off localities. When the food and food subsidy are limited, the rural and urban poor should have the priority in the PDS supply. The PDS should be closely linked with programmes of employment generation and nutrition improvement.

Answer the following questions, based on the passage above.

i. Which of the following is the main reason for insufficient supply of enough food to the poorest? 1
    A. Mismanagement of food stocks
    B. Absence of proper public distribution system
    C. Production of food is less than the demand
    D. Government's apathy towards the poor

ii. Which of the following is TRUE with reference to public distribution system? 1
    A. It has improved the effectiveness over the years.
    B. It has remained effective only in the cities.
    C. It is the unique in the world because of its effectiveness.
    D. It has reached the remotest corner of the country.

iii. Which two factors consume the major part of the allocated food subsidy? Answer in about 40 words. 2

iv. What, according to the passage, would be the outcome of making the PDS target group-oriented? 1

v. The author's writing style is - 1
    A. simplistic
    B. argumentative
    C. descriptive
    D. humorous

vi. Subsidies should not become a permanent right for the capable people. Justify in about 40 words. 2

vii. The appropriate step to make the PDS effective is_____ 1

viii. How, according to the passage, is the salaried class different from the vast majority of working population? (Answer in about 40 words) 2

ix. Which of the following, according to the passage, is compared with Dearness Allowance? 1
    A. Food for work programme
    B. Unemployment allowance
    C. Food subsidy
    D. procurement price of food grains

2. **Read the following passage.** **10**

1 The G20 group of countries under India's presidency flagged concerns about "insufficient" global action to address climate change and the need for enhanced finance, including $5.8 trillion to $5.9 trillion by 2030 for climate actions by developing countries.

2 The G20 "leaders' declaration" released at the bloc's New Delhi summit on Saturday also noted that the world needs an annual investment of $4 billion per year for clean energy technologies by 2030 to reach net-zero emissions by 2050.

3 The declaration, in sections on climate and energy, said the bloc would encourage efforts to triple renewable energy capacity globally by 2030 and accelerate efforts towards phasedown of unabated coal power, in line with national circumstances.

4 Climate policy analysts noted that the declaration has maintained status quo on coal, not introducing any new language from the last G20 meeting. Some said this was not surprising given that G20 accounts for 93 percent of global operating coal power plants and 88 per cent of new unabated coal-fired plants.

5 The declaration has "reiterated" the G20 bloc's resolve to pursue further efforts to limit the rise in the global average temperature to 1.5 degrees Celsius above pre-industrial levels. This, the declaration said, would require "rapid, deep and sustained reductions" in Earth-warming greenhouse gas emissions of 43 per cent by 2030, relative to the 2019 levels.

6   Amid scientific consensus that global emissions need to peak by 2025 to limit warming to 1.5 degrees Celsius, the declaration also noted that timeframes for peaking may be shaped by sustainable development, poverty eradication needs, equity and in line with different national circumstances.

Source - The Telegraph, Sunday, 10 Sep 2023 (Words 284)

Answer the following questions, based on the above passage.

i.   What are the two concerns of the G20 group of countries mentioned in paragraph (1)? Answer in about 40 words.   2

ii.   What is the relation between our actions till 2030 and climate in 2050?   1
      A. Investment and New Technology
      B. Zero Emission and Green Technology
      C. $4 billion per year and Zero Carbon footprint
      D. Investment in clean energy technology and Carbon Neutral Environment

iii. With regard to coal, why hasn't the present G20 policy language changed from that of the previous G20 meeting?   1

iv.   Identify the climate activist from the following three policy makers: 1
      A. Rahim - I don't think we need to do anything about burning coal.
      B. Reema - I'm happy that we are planning to triple clean energy.
      C. Daniel - I'm worried about the huge investment needed.
      D. Rohini - I prefer to have a centralised air-conditioning system installed in my house to cope with warmer days in future.

v.   Which of the following is a viable factor to determine the timeframe for peaking of emission?   1
      A. Economic development
      B. Sustainable development
      C. Equitable development
      D. All the above

vi.   How might the differences in budget priorities between different nations impact the target of zero emission by 2050? Answer in about 40 words.   2

vii. Complete the sentence appropriately.   1
      Limiting global average temperature to 1.5 degrees Celsius above pre-industrial levels can be done by _____.

viii. State TRUE or FALSE.   1
      The title, "G20 Oblivious of Obvious Climate Change", is appropriate for this passage.

SECTION B: CREATIVE WRITING SKILLS (18 marks)

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

3.   **Attempt ANY ONE of two, in about 50 words.**   4

A.   You are Vipul/Vani, the Physical Instructor of St. Paul's Academy, Bhopal. You have decided to organise an excursion to Kathmandu (Nepal) during the Autumn Break for the senior students of your school. Write a notice in about 50 words informing the students about the proposed excursion. Invent necessary details.

OR

B.   On the occasion of the Silver Jubilee celebrations the Literary Club of DAV Public School, Pune has decided to organize an inter-school debate competition. You are Pulkit/Pamela, the President of the Literary Club. Write a notice informing the students of the school about the competition. Invent necessary details.

4.   **Attempt ANY ONE of two, in about 50 words.**   4

A.   You are Asaaf/Afia.You are the Secretary of the School Alumni Association, Vision World School, Noida. The 10th Alumni Meet will be held on 30th September, 2024 at 7 p.m. at Hotel Regal. Create an invitation card giving all necessary details.

OR

B.   You are the Head Boy/ Girl of Mother India Convent, Kanpur. Your school is organising a cleanliness drive in your vicinity for parents of the school students. Draft an ***Invitation card,***

inviting the parents to join the drive with their children. Invent necessary details.

5. **Attempt ANY ONE of two, in about 120-150 words.**   5

A. Road rage is criminally violent behaviour displayed by a driver, which causes accident or incidents of violence on the road. The reason could be drugs, affluent background or alcohol. Read the inputs given below and write a letter to the Editor of an English daily expressing your concern about road rage and suggesting measures to be taken.

SUGGESTED INPUTS
May 9, 2024 ; Gurgaon
'A 35-year-old businessman and his brother were allegedly beaten up by two drivers of two private cars attached to a renowned call centre at Gurgaon in Haryana.'
July 30, 2024; Delhi
'In Delhi most drivers have no sense of basic traffic etiquette like lane driving or even right-of-way. People have now reached zero tolerance level and that shows'

OR

B. You are Suman of 20 East Enclave, New Delhi. Write an application for job in response to the following advertisement which appeared in the newspaper 'Economic Times'.

> Wanted Branch Manager for Standard Chartered Bank. The candidate should be graduate in Commerce Stream with minimum experience of 3 years. He/ She must possess excellent communicative skills. Attractive salary with perks. Apply within 15 days with detailed resume to the managing Director, Standard Chartered Bank, II phase MG Road New Delhi.

6. **Attempt ANY ONE of two, in about 120-150 words.**   5

A. Internet is a boon to the present day students. However, it has adversely affected their habit of reading printed books. Write an article for your school magazine on 'The Impact of Internet and Digital Media on Reading Habit'. You are Raghav/Rohini.

OR

B. DAV Public School Lucknow conducted a Mock Drill on 4 July 2024 on how to deal with fire emergency. As Akshay / Akshita, a press reporter with The Times of India, write a report covering the event.

SECTION C
LITERATURE TEXTBOOK AND SUPPLEMENTARY READING TEXT (40 marks)

7. **Read the given extracts and answer the questions for any one of the two given.**   6

A. ……….and realised with
pain
that she was as old as she
looked but soon
put that thought away, and
looked out at Young
Trees sprinting, the merry children spilling
out of their homes,

i. Kamala Das turned her attention from her mother, because   1
   A. She was feeling guilty.
   B. She was shirking her responsibility
   C. She was trying to escape from pain filled emotions related to her mother's old age and approaching death.
   D. She didn't like the idea of going abroad.

ii.	Why did the poet put 'that thought' away?	1
iii.	Complete the following analogy correctly. Do not repeat from the example used.	1
	Trees sprinting:………..: : pale as a late winter's moon: simile	
iv.	The phrase 'she realized with pain' indicates the poet's _____ .	1
v.	Choose the correct option with reference to the two statements given below:	1

Assertion: The poet brings in the image of merry children spilling out of their homes.
Reasoning: The merry children present an image of happiness and exuberance. This image is in stark contrast to the 'dozing' old mother who is an image of ageing, decay and passivity.
A. Both assertion and reasoning are correct. Reasoning is the correct explanation of assertion.
B. Both assertion and reasoning are correct. Reasoning is not the correct explanation of assertion
C. Assertion is right, reasoning is wrong
D. Reasoning is right, assertion is wrong

vi.	'Thought Away' means_____ .	1

OR

B.	Fishermen in the cold sea	
	would not harm whales	
	and the man gathering salt	
	would look at his hurt hands.	
i.	Write whether the following statement is TRUE or FALSE.	1
	The poet expects the fisherman to introspect and abstain from killing whales.	
ii.	What figure of speech has been used in the expression 'cold sea'?	1
iii.	How 'Keeping Quiet' is going to help the man who works as 'salt gatherer'?	1
	A. He will get time to take care of his wounded hands.	
	B. He will not work as 'salt gatherer'.	
	C. He will introspect about the type of work he does and change his profession.	
	D. He will do nothing and sit idly.	
iv.	Complete the following analogy correctly.	1
	Mining: Coal: _____: salt	
v.	What does the expression 'hurt hands' imply?	1
	A. Destruction that humans have caused to themselves.	
	B. Destruction caused to environment.	
	C. Only A	
	D. Both A & B	
vi.	The tone of the poet in the given extract is_____	1
8.	**Read the given extracts and answer the questions for ANY ONE of the two, given.**	**4**
A.	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 policy-makers a life-changing experience at an age when they're ready to absorb, learn, and most importantly, act. (Journey to the end of the Earth)	
i.	How does the writer characterise the celebrities?	1
ii.	'Students On Ice' headed by Geoff Greene is a/an _____.	1
iii.	Choose the correct option that lists the reasons for Greene's Programme:	1
	1.Making youngsters realise the harsh reality of the planet.	
	2.Provoking the youth to think about the future earnestly.	
	3.Giving a chance of exploring the North pole to the young Generation	
	4.Providing travel Opportunities to Students that were unfortunate.	
	A. 1,2 B. 3,4	
	C.1,3 D.2,4	
iv.	Her writing style of the extract can be called factual and informative. Give one reason.	1

OR

B. The Maharaja's anxiety reached a fever pitch when there remained just one tiger to achieve his tally of a hundred. He had this one thought during the day and the same dream at night. By this time the tiger farms had run dry even in his father-in-law's kingdom. It became impossible to locate tigers anywhere. Yet only one more was needed. If he could kill just that one single beast, the Maharaja would have no fears left. He could give up tiger hunting altogether. But he had to be extremely careful with that last tiger. What had the late chief astrologer said?(The Tiger King)

i. The phrase 'reached a fever pitch' means here _____   1

ii. Choose the option that best describes the Maharajah represented in the above extract?   1
   A. Self-centred, desperate
   B. Ambitious, orthodox
   C. Sentimental, confused
   D. Gullible, sentimental

iii. "It became impossible to locate tiger's anywhere'. List the reason for the given statement.   1

iv. He could give up hunting altogether after……………………   1

9. **Read the given extracts and answer the questions for ANY ONE of the two, given.**   6

A. Savita, a young girl in a drab pink dress, sits alongside an elderly woman, soldering pieces of glass. As her hands move mechanically like the tongs of a machine, I wonder if she knows the sanctity of the bangles she helps make. It symbolises an Indian woman's suhaag, auspiciousness in marriage. It will dawn on her suddenly one day when her head is draped with a red veil, her hands dyed red with henna, and red bangles rolled onto her wrists. She will then become a bride. Like the old woman beside her who became one many years ago. She still has bangles on her wrist, but no light in her eyes. "Ek waqt ser bhar khana bhi nahin khaya," she says, in a voice drained of joy. She has not enjoyed even one full meal in her entire lifetime — that's what she has reaped! Her husband, an old man with a flowing beard, says, "I know nothing except bangles. All I have done is make a house for the family to live in." Hearing him, one wonders if he has achieved what many have failed in their lifetime. He has a roof over his head! (Lost Spring)

i. What trait of the old man's character is revealed when he says "I know nothing except bangles"?   1

ii. The old woman too has sacrificed something in her life for the sake of her family. Provide evidence from the extract to justify the statement.   1

iii. "Ek waqt ser bhar khana bhi nahin khaya", the grand mother says. Her voice indicates that she is _____.   1
   A. Undergoing an emotion of great happiness.
   B. Going through an emotion without drained of joy.
   C. Undergoing an emotion of frustration and unhappiness
   D. Experiencing an emotion which reflects her fear and anxiety.

iv. What is the tone of the above extract?   1

v. "I wonder if she knows the sanctity of the bangles she helps make". In this statement, 'I wonder' reflects the author's _____   1

vi. Select the option that has same literary device as used in '.. her hands move mechanically like the tongs of a machine,"   1
   A. The wind played a symphony.
   B. The camel is the ship of the desert.
   C. Her beauty is as radiant as a star in the night sky.
   D. He walked a weary way.

OR

B. I heard M. Hamel say to me, "I won't scold you, little Franz; you must feel bad enough. See how it is! Every day we have said to ourselves, 'Bah! I've plenty of time. I'll learn it tomorrow.' And now you see where we've come out. Ah, that's the great trouble with Alsace; she puts off learning till tomorrow. Now those fellows out there will have the right to say to you, 'How is it; you pretend to be Frenchmen, and yet you can neither speak nor write your own language?' But you are not the worst, poor little Franz. We've all a great deal to reproach ourselves with." "Your parents were not anxious enough to have you learn. They preferred to put you to work on a farm or

at the mills, so as to have a little more money. And I? I've been to blame also. Have I not often sent you to water my flowers instead of learning your lessons? And when I wanted to go fishing, did I not just give you a holiday?" (The Last Lesson)

i. 'Bah! I've plenty of time. I'll learn it tomorrow. 'Here M Hamel points out to the _____ of the villagers. (two words)   1

ii. The tone evident when M Hamel makes reference to 'those fellows' is   1
    A. fear
    B. bitterness
    C. fun
    D. respect

iii. Why cannot the gathering at the classroom identify themselves as French in real sense of terms ?   1

iv. Pick out the words that convey deep sense of regret of M Hamel as a teacher of French.   1

v. What did parents value more than going to school?   1

vi. Which of the following is the most suitable heading for the extract?   1
    A. Do not worry about tomorrow; for tomorrow will worry about itself.
    B. Tomorrow is a new day.
    C. Tomorrow belongs to the people who prepare for it today.
    D. Never wait for tomorrow. What if tomorrow never comes.

10. **Answer ANY FIVE of the following six questions, in about 40-50 words. (2 X 5 =10)**

i. "Will they make them sing in German, even the pigeons? Why does Franz think so? (The Last Lesson)   2

ii. In spite of despair and disease pervading the lives of the slum children, they are not devoid of hope. How far do you agree? (Lost Spring)   2

iii. Despite his philosophical insights, the vagabond fails to resist temptations. What would you attribute this to? Explain with reference to any instance from the text. (The Rattrap)   2

iv. It is said that courage in danger is half the battle won. Comment with reference to William Douglas's account 'Deep Water'. (Deep Water)   2

v. The qualities and skills of a great leader are displayed by Gandhi in the Champaran movement. Identify two of them and justify each with an example from the lesson. (Indigo)   2

vi. Explain: "Therefore are we wreathing a flowery band to bind us to earth". (A thing of Beauty)   2

11. **Answer ANY TWO of the following three questions, in about 40-50 words. (2x2=4)**

i. The third level in the story 'The Third Level' is a medium of escape
through which Charley yearns to be away from life's harsh realities.
What other ways can one take to dissociate him/her from the worries and
insecurities of modern life?   2

ii. 'Knowing too much of your future is never a good thing.' In the light of this quote, examine how knowing the future paved way for the tiger king's end.   2

iii. Antarctica is unlike any other place on Earth. Justify the statement.   2

12. **Answer ANY ONE of the following two questions, in about 120-150 words.**   5

A. Franz from 'The Last Lesson' and the peddler from 'The Rattrap' demonstrate the importance of learning from our mistakes to evolve into better people. Imagine that, Sania your friend, feels as if she has made a mistake by not taking her academics seriously. Write a paragraph to Sania discussing instances from the two texts to give her an insight into the human tendency to make mistakes and learn from them.

You may begin like this: Sania, all of us have made mistakes at one point or another in our lives. After all, to err is human....

<div align="center">OR</div>

B. After your reading of the poem 'A Thing of Beauty', you associate your view on the adage-'beauty is only skin-deep' with the poet's idea of beauty.
You have been asked to address your peers and share-
→ your experiences of joy that a thing of beauty offers
→ the importance of inner beauty that is also a source of inspiration
Draft your views.
You may begin this way:
Good morning, everyone.
As I analysed the poem...

You may end this way.
To conclude, I'd like to say that ...

13. **Answer ANY ONE of the following two questions, in about 120-150 words.**   5
A. In the story, 'The Third Level' by Jack Finney, Charley is obsessed with finding the third level.
In an attempt to thrash out whether this obsession is a good quality or a harmful one, Charley's wife expresses her thoughts in a diary entry.
As Louisa, Charley's wife, write this diary entry. Support your response with reference to the story.
You may begin this way:
I have been married to Charley for a few years now and I have always known him to be an intelligent man with an imaginative mind. However, his recent obsession with finding the Third Level has …

OR

B. Imagine you are Aarya, one of the participants of the 'Students on Ice' programme. You think that the programme is a great initiative to equip the future generation with the knowledge to save Earth and you are eager to share with friend your views about this initiative for the betterment of our planet.

Pen down your views in a letter to Shashi.
You may begin this way:

Dear Shashi
I have gone through your letter in which you had a lot of queries about our 'Students on Ice' programme'. I too feel........

****

D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION: 2024 – 2025

CLASS: XII   **MAXIMUM MARKS: 70**
SUBJECT: GEOGRAPHY (029)   **TIME: 3 HOURS**

General Instructions:

1. This question paper contains 30 questions in 7 printed pages. All questions are compulsory.

2. This question paper is divided into five sections. Sections-A, B, C, D and E.

3. Section A - Question number 1 to 17 are Multiple Choice type questions carrying 1 mark each.

4. Section B- Question number 18 and 19 are Source based questions carrying 3 marks each.

5. Section C- Question number 20 to 23 are Short Answer type questions carrying 3 marks each. Answer to these questions shall be written in 80 to 100 words.

6. Section D Question number 24 to 28 are Long Answer type questions carrying 5 marks each. Answer to these questions shall be written in 120 to 150 words.

7. Section E Question number 29 and 30 are Map based questions.

SECTION-A
Question numbers 1 to 17 are MCQS.

1. Consider the following and choose the correct answer with the help of given codes: -   1

Type of farming	Practiced in
a. Transhumance	1. Central America
b. Kolkhoz	2. Denmark
c. Milpa	3. Himalaya
d. Cooperative	4. Erstwhile Soviet Union

   Codes:

   A. a-3, b-2, c-4, d-1   B. a-4, b-3, c-1, d-2

   C. a-3, b-4, c-2, d-1   D. a-3, b-4, c-1, d-2

2. Consider the following statements and choose the correct answer with the help of given   1
Option:

   Statement I: - Access to family planning services is a significant factor in limiting population growth and improving women's health.

   Statement II: - People are the resources who make use of the country's other resources and decide its policies.

   A. Both the statements are true.   B. Only statement I is true.

   C. Only statement II is true   D. Both the statements are wrong.

3. Which of the following countries are marked as A & B in the list of the 10 most populous   1
countries of the world?

   A. A- Bangladesh, B- Canada

   B. A - Sri Lanka, B - Bangladesh

   C. A – Canada, B - USA

   D. A – Bangladesh, B - USA

Most Populous Countries
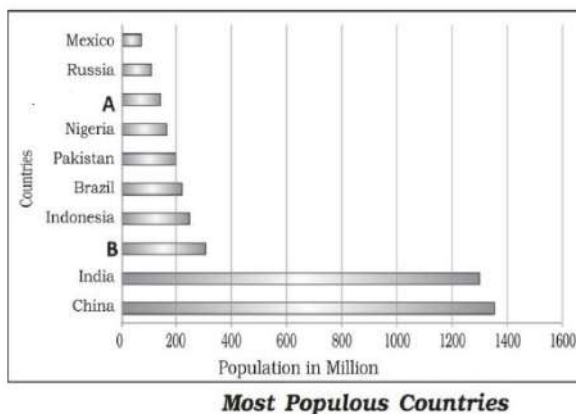
4. There are two statements marked as Assertion(A) and Reason(R). Mark your answer as per the codes provided below.   1

   Assertion(A): Mega cities of the world continue to attract large number of migrants every year.

   Reason(R): Mining and industrial activities generate employment. So, skilled and semi–skilled workers move to these areas and make them densely populated

   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. Both (A) and (R) are incorrect.
   D. (A) is correct but (R) is incorrect.

5. To understand why a particular region keeps reporting low or high levels of human development, it is important to look at:-   1
   1. The pattern of government expenditure on the defence sector.
   2. The political environment of the country.
   3. The amount of freedom people has.

   Option:
   A. Only 1 & 2 are correct
   B. Only 2 & 3 are correct
   C. All 1, 2 & 3 are correct
   D. Only 1 & 3 are correct

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

   Assertion (A): In India, a large number of women and persons belonging to socially and economically backward groups drop out of school.

   Reason (R) : The opportunities available to people in India is equal irrespective of their gender, race, income and in the Indian case, caste.

   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. Both (A) and (R) are incorrect.
   D. (A) is correct but (R) is incorrect.

7. Which of the following pair is **NOT** correctly matched?   1

Option	SUB FIELDS	SISTER DISCIPLINE
A.	Geography of Leisure	Sociology
B.	Behavioural Geography	Psychology
C.	Medical Geography	Psephology
D.	Cultural Geography	Anthropology

8. Consider the following statements and choose the correct option: 1
   Statement 1: Gathering and hunting are the oldest economic activity.
   Statement 2: Foraged products often of better quality and at lower prices, have replaced many items supplied by the industrial producers.

Option:
- A. Both the statements are true.
- B. Only statement I is true.
- C. Only statement II is true.
- D. Both the statements are wrong

9. Complete the following chart using the correct option: 1

Colonial Ruler	Plantation Crop(s)	Introduced in
French	**(i)**	West Africa.
Dutch	Sugarcane	**(ii)**
British	Tea	India and Sri Lanka

Choose the correct option:
- A. (i) Coffee & Sugarcane, (ii) Brazil
- B. (i) Banana & cocoa,(ii) Philippines
- C. (i) Rubber & Sugarcane, (ii) Malaysia
- D. (i) Coffee & cocoa,(ii) Indonesia

10. Which of the following is **NOT** a characteristic of Footloose Industries: -   1
- A. They are dependent on specific raw material
- B. They produce in small quantity and also employ a small labour force.
- C. The important factor in their location is accessibility by road network.
- D. They are non-polluting industries.

11. If you are asked to formulate the National Youth Policy, what will be of the utmost priority according to you?   1

Choose the correct option:
- A. Empower the youth to achieve their full potential.
- B. Focus the youth to concentrate in their studies.
- C. Bring the youth into active politics to shape the opinion.
- D. Focus on the development of games & sports for youth.

12. Consider the following points and choose the most appropriate option related to manufacturing: 1
1. Manufacturing literally means 'to make by man'.
2. It is essentially a process which involves transforming finished goods into high value goods for sale in distant markets.
3. Conceptually, an industry is a geographically located manufacturing unit maintaining books of accounts and, records under a public sector.
4. As the term industry is comprehensive, it is entirely indifferent from 'manufacturing'

Option:
- A. All 1,2,3 & 4 are Correct
- B. Only 1,2 & 3 are correct
- C. All 1,2,3 & 4 are incorrect
- D. Only 3 & 4 is correct

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

Assertion (A): Social relations among rural people are intimate.

Reason (R) : Rural people are less mobile.

Codes:

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

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

C. Both (A) and (R) are incorrect.

D. (A) is correct but (R) is incorrect

14. Consider the following statements and choose the correct answer with the help of given options.   1

Statement I: With size, the economic character and social structure of settlements changes and so do its ecology and technology.

Statement II: The process of settlement inherently involves grouping of people and apportioning of territory as their resource base.

Codes:

    A. Only statement I is correct.

    B. Only statement II is correct .

    C. Both the statements are correct, and statement II correctly explains statement I.

    D. Both the statements are true but not related with each other.

15. Identify the type of settlement based on the information given below:-   1

    I.   In this settlement, one or more sections of the village society choose or is forced to live a little away from the main cluster or village.

    II.   Generally, the land-owning and dominant community occupies the central part of the main village, whereas people of lower strata of society and menial workers settle on the outer flanks of the village.

    Choose the correct option:

    A. Clustered Settlement   B. Semi Clustered Settlement

    C. Hamleted Settlement   D. Dispersed Settlement.

16. Arabica, Robusta and Liberica is the variety of :-   1

    A. Date Palm   B. Coffee   C. Cocoa   D. Rubber

17. Which of the following is **NOT** taken up in Neeru-Meeru (Water and You) programme (in Andhra Pradesh) and Arvary Pani Sansad (in Alwar, Rajasthan)?   1

    A. constructions of various water-harvesting structures

    B. Creating Check Dams

    C. Compulsory structure of Roof top Rainwater harvesting in each household.

    D. Creating Percolation ponds & Johad

SECTION-B
Question 18 & 19 are Source based questions.

18. Read the passage carefully and answer the questions that follows: -   2+1=3

POPULATION CONTROL MEASURES

Family planning is the spacing or preventing the birth of children. Access to family planning services is a significant factor in limiting population growth and improving women's health. Propaganda, free availability of contraceptives and tax disincentives for large families are some of the measures which can help population control. Thomas Malthus in his theory (1798) stated that the number of people would increase faster than the food supply. Any further increase would result in a population crash caused by famine, disease and war. The preventive checks are better than the physical checks. For the sustainability of our resources, the world will have to control the rapid population increase.

4

I. What adversities will arise if population growth cannot be limited?

II. Preventive checks are often considered as the better measure of population control than physical checks. Why?

19. Read the passage related to smart water management in India carefully and answer the questions that follows:-

Atal Bhujal Yojana (Atal Jal) is being implemented in 8220 water stressed Gram Panchayats of 229 administrative blocks/ talukas in 80 districts of seven states, viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, and Uttar Pradesh. The selected States account for about 37 per cent of the total number of water-stressed (over-exploited, critical and semi-critical) blocks in India. One of the key aspects of ATAL JAL is to bring in behavioural changes in the community, from the prevailing attitude of consumption to conservation and smart water management.

(Source: Annual Report, Ministry of Jal Shakti, Govt. of India, 2022-23)

I. Mention the major objective of the Programme.   1+1+1

II. Name any other two initiatives taken by the Govt. of India in recent years towards proper management of water.

III. What type of behavioural changes do you think will be beneficial? Justify.

SECTION-C
Question numbers 20 to 23 are Short Answer type questions.

20. "The basic goal of development is to create conditions where people can live meaningful lives." Demonstrate what is a 'Meaningful life' according to Dr. Mahbub-ul-Haq.   3

OR

"Each generation must ensure the availability of choices and opportunities to its future generations." Explain the statement in the light of Human Development.

21. 'High technology, or simply high-tech, is the latest generation of manufacturing activities.'   2+1

Based on the statement write any two key characteristics of High-tech industries. Also mention two example of global technopolies.

22. "Discrimination, in general, and gender discrimination, in particular, is a crime against humanity." Evaluate the statement   3

OR

Write a short note on the phase that refers to the period of population explosion in India.

23. Enlist any three differences between Protective and Productive irrigation.   3

SECTION-D
Question numbers 24 to 28 are Long Answer Type questions.

24. "Possibilities can be created within the limits." Illustrate.   5

25. Explain the factors / conditions required for the development of Market Gardening and Horticulture near the urban areas of the world. Which form of Market Gardening has evolved as Truck Farming and why?   3+2

OR

'Unlike nomadic herding, commercial livestock rearing is more organised and capital intensive.' Why? Mention the other contrasting features between these two forms of rearing livestock.   1+4

5

26. "Each town performs a number of functions." Classify Indian towns on the basis of dominant or specialised functions and explain with the help of relevant examples. 1+4

27. "Poor performance of south-west monsoon also adversely affects the supply of canal water for irrigation and the resource intensive approach has become unmanageable for marginal and small farmers." Highlight the adverse consequences mentioned in the given statement that the farmers suffer from. 5

OR

'CPRs can be defined as community's natural resource.' Why so? What benefits do the marginal section of the rural community derive from CPRs? 2+3

28. "In Punjab, Haryana and western Uttar Pradesh, more than 85 per cent of their net sown area is under irrigation.' Examine the statement mentioning the necessity of irrigation in a country like India. Does it have any detrimental impact? Give your opinion. 5

OR

Under which scheme of Government of India "Har Khet Ko Pani" was initiated? Enlist four other strategies adopted under this scheme.

SECTION-E
Question numbers 29 & 30 are Map based questions having 5 sub-parts each.

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. 5

    A. An area of Subsistence Gathering
    B. An area of Extensive Commercial Grain Farming
    C. Area where the people practice Nomadic Herding
    D. An area of Mixed Farming
    E. Area of Commercial Livestock Rearing
    F. Grassland where Extensive Agriculture is practiced
    G. An Area where people practiced Subsistence Gathering and Nomadism

30 Locate and label **any five** of the following geographical features on the Political Outline map of India with appropriate symbols: 5
    a. State with Highest Density of Population (2011)
    b. State with Lowest Density of Population (2011)
    c. Leading Producing state of Coffee
    d. Leading Producing state of Rice
    e. Leading Producing state of Wheat
    f. A Tea Producing state
    g. A leading Sugarcane producing state in south India.

******_____******

WORLD OUTLINE MAP

Q.No.29

G _____

E _____

C _____

A _____

F _____

D _____ B _____

Map not to Scale
Copyright © 2017 www.mapsofindia.com
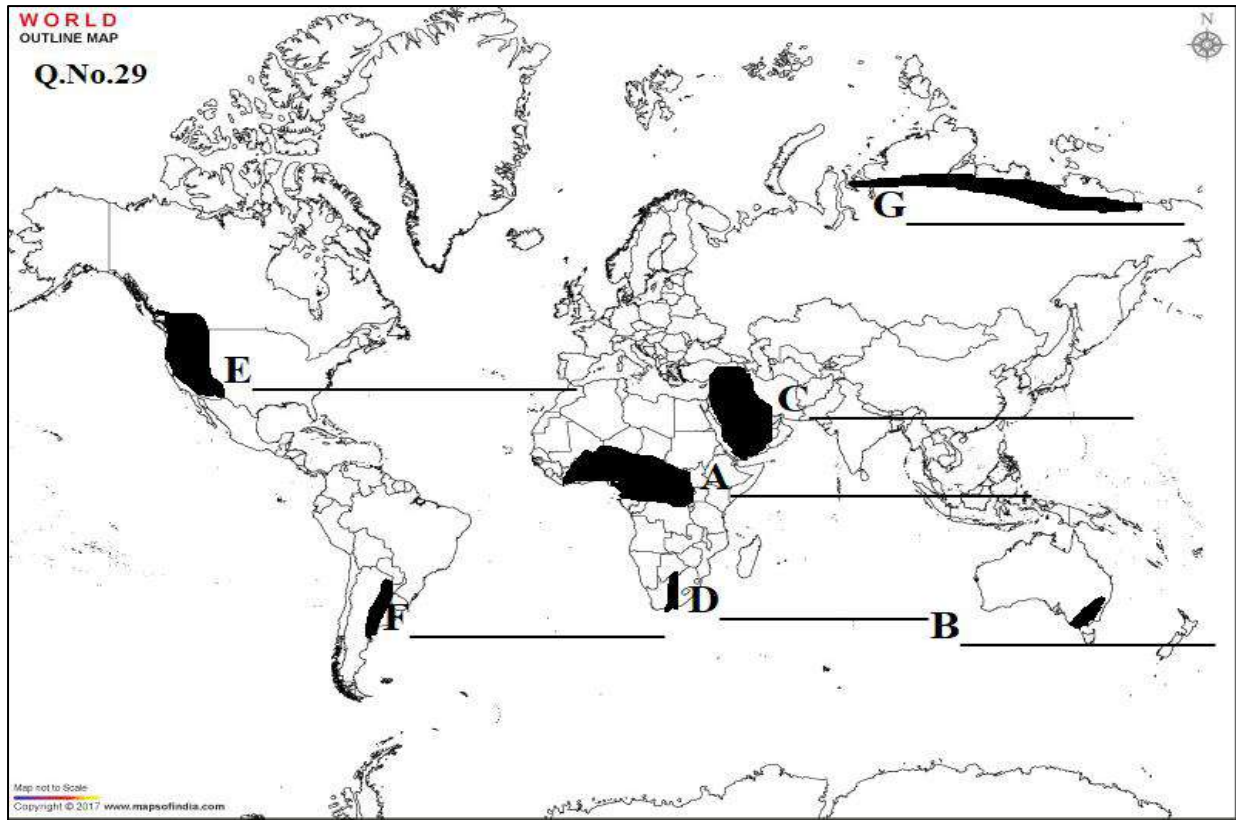
Q.No 30

Name:-

Roll No. :-

D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
Session 2024-25

SUBJECT : HEALTH CARE   **MAX. TIME: 3 HOURS**

CLASS : XII   **MAX. MARKS: 60**

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of **24 questions** in two sections–Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (6+18= 24 questions) , a candidate has to answer (6+11= 17)questions in the allotted(maximum) time of 3 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A- OBJECTIVE TYPE QUESTIONS (30MARKS):**
    i. This section has 06 questions.
    ii. There is no negative marking.
    iii. Do as per the instructions given.
    iv. Marks allotted are mentioned against each question/part.
7. **SECTION B –SUBJECTIVE TYPE QUESTIONS (30MARKS):**
    i. This section contains 18 questions.
    ii. A candidate has to do11questions.
    iii. Do as per the instructions given.
    iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q.1   **Answer any 4 out of the given 6 questions on Employability Skills (1 x4=4 marks)**

i. Which of these sentences are in passive voice ?   1
   a. They are watching a movie.   b. The clock was repaired by Raju.
   c. The girls play hand cricket.

ii. Ravi has feelings of emptiness, abandonment and suicide. What type of personality   1
   disorder he has?
   a. Borderline   b. Dependent   c. Avoidant

iii. Which one of these is used to perform addition in spreadsheets ?   1
   a. Format option   b. Formula   c, Graphs

iv. Which one of these is not a parameter to describe an individual's personality?   1
   a. Self Confidence   b . Openness   c . Neuroticism

v. _____is all about finding and listing your goals and then planning on how to   1
   complete them.
   a. Goal setting   b).Goal seeking   c).Goal checking

vi. Rahul is helping his brother to overcome a personality disorder. What should he do ?   1
    a. Talk to his brother.   b. Help him build confidence.   c. Both a and b.

Q.2   **Answer any 5 out of the given 6 questions (1x5= 5 marks)**

i. The full form of LAMA is   1
   a. Leaving against medical advice   b. Legal action method and assessment
   c. Legal advice measurement and analysis

ii. Problem focused charting **does not** include   1
   a . Problem Identification and Assessment   b .Intervention and Evaluation
   c .Individual record of patient

iii. Documentation of complete assessment of a patient is done in   1
     a. Assessment Note   b. Admission Note   c. Change of shift note

iv. When a patient is transferred to another facility either temporarily or permanently, a   1
     _____is written.
     a. Admission-note   b. Transfer-note   c. Patient teaching-note

v. An _____ is part of medical record that documents the patient's status,   1
reasons why the patient is admitted for inpatient care to a hospital and the initial
instructions for the patient's care.
     a. Discharge-note   b. Admission-note   c. Assessment-note

vi. Children of 3 to 5 years are called as   .   1
     a. Toddler   b. Infant   c. Preschool Child

Q.3 **Answer any 6 out of the given 7 questions (1x6= 6 marks)**

i. PACU stands for   1
     a.Post operative care units   b.Post anaesthetic care units.
     c. Post aseptic care unit.

ii. Heart rate of child ranges from   1
     a. 60-100 bpm   b . 70-120 pm   c . 100-160m bpm

iii The outermost/ exit zone of OT complex is   1
     a. Protective zone   b.Clean zone   c.Sterile/Aseptic Zone

iv. Blood pressure of teens range from   1
     a) 90-110 mm Hg   b) 110 - 135/65 to 85 mm Hg   c) 65-90 mm Hg

v. Human tissues, organs or fluids, body parts and contaminated animal carcasses are called   1
as   .
     a. Chemical waste   b. Pathological waste   c. Pharmaceutical waste

vi. Disposal of _____ wastes is done by autoclaving ,hydro claving ,microwave or   1
incineration.
     a. Microbiological and bio-technological wastes   b. Chemical wastes
     c . Anatomical wastes

vii Solvents and reagents used for laboratory preparations, disinfectants, and heavy metals   1
contained in medical devices (e.g. mercury in broken thermometers) and batteries are
called as   .
     a. Pathological waste   b. Chemical waste   c. Pharmaceutical waste

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

i. _____Color bag is used to store waste sharps including metals .   1
     a. Yellow   b. Red   c. White

ii _____ Investigations are done, so as to ensure fitness for anesthesia and   1
surgery.
     a. Preoperative   b. Operative   c . Postoperative

iii Contaminated waste (Recyclable) are stored in   1
     a) Yellow category   b)Red category   c) blue category

iv Expired, unused and contaminated drugs and vaccines are called .   1
     a. Cytotoxic waste   b. Pharmaceutical waste   c. Chemical waste

v _____ Is a room within a hospital, which is used for dirty utility and disposal   1
corridor.
     a. Operating theater   b. Clean zone   c .Disposal zone

vi The requirement of _____ varies with the type of surgeries routinely   1
being done in a particular operating room.
     a. Factory equipment   b. Medical equipment   c . Laboratory
equipment

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

i. The full form of C T Scan is   .   1
     a. Computed Tomography Scan   b. Computer Tomography Scan
     c. Computed Topography Scan

ii	Disposal of radioactive waste is done in accordance to the guidelines of	1
	a. AIIMS b. BARC c. MIC	
iii	Formaldehyde used for preserving tissues and organs fall under	1
	a. Chemical waste b. Infected waste c. Radioactive waste	

iv   A _____ is administered on the night before surgery to reduce anxiety and   1
ensure adequate rest.
          a. antacid   b. sedative   c. analgesic

v   Choose the **incorrect option** from the following   1
          a. Spectacles or Contact lenses need to be removed in a pre operation setting
          b. The patient is asked not to pass urine before operation
          c. Any medical disorder present is treated appropriately at the time of surgery.

vi   _____ is the fulfillment of the special needs and requirements that is   1
unique to age group of birth to 1 year
          a. Child care   b) Adult care   c) Elderly care

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

i.   Write full form of EEG   1
      a. Electrocardiogram   b. Electrocardiography   c.
      Electroencephalography

ii   TSSU stands for   1
      a. Total Sterile supply unit   b. Theatre sterile supply unit   c. Theatre sterile suction unit

iii   _____ is seen often after abdominal surgery   1
      a. Flatulence   b. Pulmonary embolism   c. Hypostatic
      pneumonia

iv   _____ Leads to Physical damage, illness, quality of life, mental   1
and social problems.
      a. Stress   b. Time   c. Mind

v   This zone connects the protective zone to that of the aseptic zone   1
      a. Sterile   b. Clean   c . Disposal

vi   All OT complex areas must be equipped with medical gases delivery system. The gases   1
include
      a. Oxygen, Carbon di oxide, medical air
      b. Carbon di oxide,Nitrous oxide , medical air
      c. Oxygen, Nitrous oxide , medical air

SECTIONB: SUBJECTIVE TYPE QUESTIONS
Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks) Answer each question in 20–30 words.

7   Describe the acronym RESPECT in relation to Active listening. (any 4 letters)   2

8   Give examples of any 2 types of sentences from the types given below :   2
     Declarative b. Interrogative c. Exclamatory d. Imperative

9   State the FFM or Five factor Model of describing an individual's personality.   2

10   Describe any four parameters of SMART model of setting Goals.   2

11   List down four steps by which you can manage stress.   2

Answer any3 out of the given 5 questions in 20–30 words each (2 x3 =6marks)

12   What confidentiality is important in maintaining Medical record of the patient?   2

13   Why do elderly people need special care ?   2

14   Differentiate between Outpatient and Inpatient record.   2

15	State the differences between a. pathological waste and general waste. b. Air borne route and oral route of transmission of disease	2
16	Enumerate the information of label that is tied around the wrist of patient.	2

Answer any 2 out of the given 3 questions in30–50 words each (3x2=6marks)

17	Enumerate three qualities a GDA should possess while communication with elderly people.	3
18	Describe the importance of Biomedical waste management .	3
19	Write down main strategies of pre operative preparation of patient for O.T.	3

Answer any 3 out of the given5 questions in50–80 words each (4x3=12 marks)

20	Explain about following medical records. i.Change of Shift Report ii. Transfer and Discharge Notes	4
21	How the GDA can help elderly to take care of Skin related problem?	4
22	How are the special needs of infant different from elders?	4
23	How is the Yellow, Red , White and Blue category of storage of Biomedical wastes different from each other . Explain with examples.	4
24	Explain the role of GDA in providing Post operative care to a patient.	4

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DAV INSTITUTIONS, WEST BENGAL ZONE
HALF-YEARLY EXAMINATION
SESSION – 2024-25

CLASS – XII   **MAXIMUM MARKS – 80**
SUBJECT – HISTORY   **TIME – 3 HOURS**

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.

9. There are 5 pages.

SECTION A

1. Identify the following statement which is incorrect regarding the weights used during the Harappa and Mohenjodaro period---   1
A. In Harappa and Mohenjodaro period, exchanges were regulated by a precise system of weights, usually made of a stone called chert.
B. They were generally cubical and without markings.
C. The higher dominations of weights were binary in multiple of two.
D. The smaller weights were probably used for weighing jewellery and beads.

2. In Harappan civilization the variety of objects on which writing has been found. Specify the feature of Harappan writing--   1
A. Alphabetical   B. Written from left to right
C. The longest containing about 24 signs   D. Written from right to left

3. With reference to the town planning of Harappan society match Column-A with column- B, by using the codes given below: 1

List I	List II
i) Citadel	a) Eastern part of Mohenjodaro
ii) Massive structure	b) Sump and Cesspit
iii) Lower Town	c) Warehouse
iv) Drainage system	d) Built on mud-brick platforms

           i) ii) iii) iv)
A. b) c) d) a)
B. c) d) b) a)
C. d) c) a) b)
D. c) a) d) b)

4. All of the following statements regarding increasing agricultural production in 6th century BCE are correct except –   1
A. Parts of Punjab and Rajasthan adopted iron ploughshare
B. Irrigation was adopted to increase agricultural production
C. Production of paddy was dramatically increased by the introduction of transplantation.
D. The iron-tipped ploughshare was used to turn the alluvial soil in areas of high rainfall.

1

5. Ancient Indian text discusses the concepts of statecraft and political theory. Find out the correct option.
    A. Mahabharata   B. Ramayana   C. Manusmriti   D. Arthshastra   1

6. Which of the following statements is incorrect about the duties as laid down in Manusmriti for the Chandalas?   1
    A. They had to live on the outskirts of the village.
    B. They had to use discarded utensils.
    C. They were supposed to wear old clothes of the villagers and ornaments made from shells.
    D. It was their duty to serve as executioner and dispose of the bodies of those who had no relatives.

7. Identify the statement which is incorrect regarding Gotami-puta-siri-Satkarni –   1
    A. He belonged to the Satavahana Dynasty.
    B. He claimed to be a unique Brahmana.
    C. He was known as destroyer of the pride of Kshatriyas
    D. He allowed intermarriage amongst members of the four varnas.

8. Which of the following pairs is correctly matched?   1
    A. Anatta -Transient   B. Anica - Soulless
    C. Dukkha – Sorrow   D. Samanas - Happiness

9. The collection of rules for people in a Sangha is in –   1
    A. Vessantara Jataka   B. SuttaPitaka   C. VinayaPitaka   D. AbhidhammaPitaka

10. Which of the following is the most important idea in Jainism?   1
    A. Observing celibacy
    B. Entire world is animated
    C. Belief in non-violence
    D. Asceticism and penance are required to free oneself from the cycle of Karma.

11. The traveller's accounts often reflected the biases and perspectives of their –   1
    A. Political leaders   B. Religious beliefs
    C. Economic interests   D. Cultural backgrounds

12. He was particularly fascinated with the trading conditions in India –   1
    A. Portuguese writer Duarte Barbosa   B. French jeweler Jean-Baptiste Travernier
    C. Italian doctor Manucci   D. French historian Francois Bernier

13. Consider the following statements: 1
    a. Montesquieu used Bernier's accounts to develop his ideas of oriental despotism.
    b. Bernier gave a detailed report on rural society.
    c. According to Bernier, crown ownership of land was good for peasants.
    d. Bernier considered Indian king was the king of beggars.
    Which of the given statement/s is/are correct?
    A. a, b, c   B. b, c, d   C. a, b, d   D. b and d

14. **Identify the name of the groups from the information given below—**   1
    They challenged the idea of caste and the pollution attributed to certain groups by Brahmanas.
    A. Alvars   B. Nayanars   C. Lingayats   D. Sufis

15. Under _____ the community got consolidated as a socio-religious and military force .   1
    Choose the correct option -
    A. Baba Guru Nanak   B. Guru Tegh Bahadur   C. Guru Gobind Singh   D. Guru Arjan

16. The Virupaksha was the most important god of Vijaynagara Empire. Choose the significant   1
    aspect related to the statement from the following options--
    i) The rulers encouraged the construction of temples
    ii) The temples were centres of ritual functions
    iii) All royal orders were signed as 'Shri Virupaksha'.
    iv) The rulers claimed to rule on behalf of the god Virupaksha.
    A. Only I   B. ii and iii   C. iii and iv   D. ii, iii, iv

17. State the significance of the Hampi region in the Vijayanagara Empire—   1
    A. Religious centre   B. Administrative capital
    C. Military stronghold   D. Economic hub

2

18. The scenes from Ramayana were sculpted on the inner walls of--   1
   A. Lotus Mahal   B. Hazara Rama Temple   C.Virupaksha Temple   D. Vitthala Temple

19. There are two statements marked as Assertion (A) and Reason(R). Read the statements and   1
   choose the appropriate option from the options given below –
   Assertion: Historians believe that Ashoka was more powerful and industrious, as also more
   humble than later rulers who adopted grandiose titles.
   Reason: The message on Asokan inscriptions was the same as that of most other rulers.
   A. Both Assertion (A) and Reason(R) are true and Reason (R) is correct explanation of
   Assertion (A).
   B. Both Assertion (A) and Reason(R) are true but Reason (R) is not the correct explanation of
   Assertion (A).
   C. Assertion (A) is true but Reason(R) is false.
   D. Assertion (A) is false but Reason(R) is true.

20. There are two statements marked as Assertion (A) and Reason(R). Read the statements and   1
   choose the appropriate option from the options given below -
   Assertion(A): Shaikh Nasiruddin appointed several spiritual successors and deputed them to set
   up hospices in various parts of the subcontinent.
   Reason(R): As a result the teachings, practices and organization of the Chistis spread rapidly.
   A. Both A and R is correct and R is the correct explanation of A.
   B. Both A and R is correct but R is not the correct explanation of A.
   C. A is correct but R is incorrect.
   D. R is correct but A is incorrect.

21.   1

   This is a sculpture of _____ depicting a scene from Mahabharata
      A. West Bengal   B. Tamil Nadu   C. Karnataka   D. Uttar Pradesh

SECTION B(SHORT ANSWER TYPE QUESTIONS)   3X6=18

22. Early Harappan archaeologists thought that certain objects that seemed unusual and unfamiliar
   may have had a religious significance. Analyze.

   OR

   Discuss the process of material procurement for craft production of Harappan civilization
   culture.

23. Explain briefly the notions of kingship during Kushana and Gupta empire.

24. Mention any three limitations of inscriptional evidence.

25. Critically examine the duties laid down in Manusmriti for the Chandalas.

26. Explain the observations of Ibn-Battuta about the cities of India, with special reference to
   Delhi.

27. What do you think were the advantages of enclosing agricultural land within the fortified area
   of the city?

   OR

   'The Mahanavami dibba in the Royal center of Vijayanagara has been assigned name on the
   basis of its form of building as well as functions.' Elaborate.

SECTION C (LONG ANSWER TYPE QUESTIONS)   8X3=24

28. Explain giving examples the connection between the State and the Bhakti tradition.

   OR

   Examine the relationship between the Alvars and Nayanars of Tamil Nadu and the state from
   the eight till the eighteenth century.

29. Explain the structural and sculptural features of the Sanchi stupa.

   OR

   "Buddhism grew rapidly both during the lifetime of the Buddha and after his death". Explain

3

30. "The Amara-Nayaka system was a major political innovation of the Vijayanagara Empire''
Explain.

OR

Explain why AbdurRazzaq, a Persian ambassador, was greatly impressed by the fortification of
Vijayanagara Empire during the 15th century.

SECTION D   3X4=12
SOURCE BASED QUESTIONS

31. Read the following source carefully and answer the questions that follow.   1+2+1
Read the following passage and answer the questions that follow.
The frontiers of the Harappan Civilisation have little or no connection with present-day national
boundaries.
However, with the partition of the sub-continent and the creation of Pakistan, the major sites are
now in Pakistan territory. This has spurred Indian archaeologists to try and locate sites in India.
An extensive survey in Kutch has revealed a number of Harappan settlements and explorations
in Punjab and Harappan settlements have added to the list of Harappan sites. While Kalibangan,
Lothal, Rakhi Garhi and most recently Dholavira have been discovered, explored and excavated
as part of these efforts, fresh explorations continue.
31.1. What problem has occurred in the frontiers of the Harappan Civilization?
31.2. What has spurred Indian archaeologists to do?
31.3. Which settements have been found recently?

32. This is Al-Biruni's account of the system of varnas: The highest caste is the Brahmana,   1+2+1
of whom the books of the Hindus tell us that they were created from the head of Brahman.
And as the Brahman is only another name for the force called nature, and the head is the
highest part of the ......body, the Brahmana is the choice part of the whole genus. Therefore,
the Hindus consider them the very best of mankind. The next caste is the Kshatriya who were
created, as they say, from the shoulders and hands of Brahman. Their degree is not much below
that of the Brahmana. After them, follow the Vaishya, who were created from the thigh of
Brahman. The Sudras were created from his feet. Between the latter two classes, there is no
very great distance. Much, however, as these classes differ from each other, they live together
in the same towns and villages, mixed together in the same houses and lodgings.
32.1 Explain Al-Biruni's account of the system of Varnas.
32.2 Do you consider this type of division justified? Explain with reasons.
32.3. How was the system not quite rigid in the real life? Explain.

33.   Why Kinfolk Quarreled?   1+2+1
This is an excerpt from the Adi Parvan (literally, the first section) of the Sanskrit, Mahabharata,
describing why conflicts arose amongst the Kauravas and Pandavas.
The Kauravas were the…sons of Dhritarashtra and the Pandavas…were their cousins. Since
Dhritarashtra was blind, his younger brother Pandu ascended the throne of Hastinapura.. .
However, after the premature death of Pandu, Dhritarashtra became king, as the royal princes
were still very young. As the princes grew up together, the citizens of Hastinapura began to
express their preference for the Pandavas, for they were more capable and virtuous than the
Kauravas.
This made Duryodhana, the eldest of the Kauravas, jealous. He approached his father and said,
"You yourself did not receive the throne, although it fell to you, because of your defect. If the
Pandava receives the patrimony from Pandu, his son will surely inherit it in turn and so will his
son and his.
We ourselves with our sons shall be excluded from the royal succession and become of slight
regard in the eyes of the world, lord of the Earth!"
33.1. Why did the citizens of Hastinapura , express preference for Pandavas?
33.2. Explain the reactions of Duryodhana against Pandavas.
33.3. Explain the criterion of patrilineal succession.

4

SECTION E (MAP BASED QUESTION)   4+1=5

34.   34.1. On the given political map of India, locate and label the followings with appropriate symbols :

      a. Port settlement of Harappan Civilization

      b. The site of the Great Bath

      c. Sanchi

 34.2. On the same map, two places are marked as A and B. Identify them and write the names.
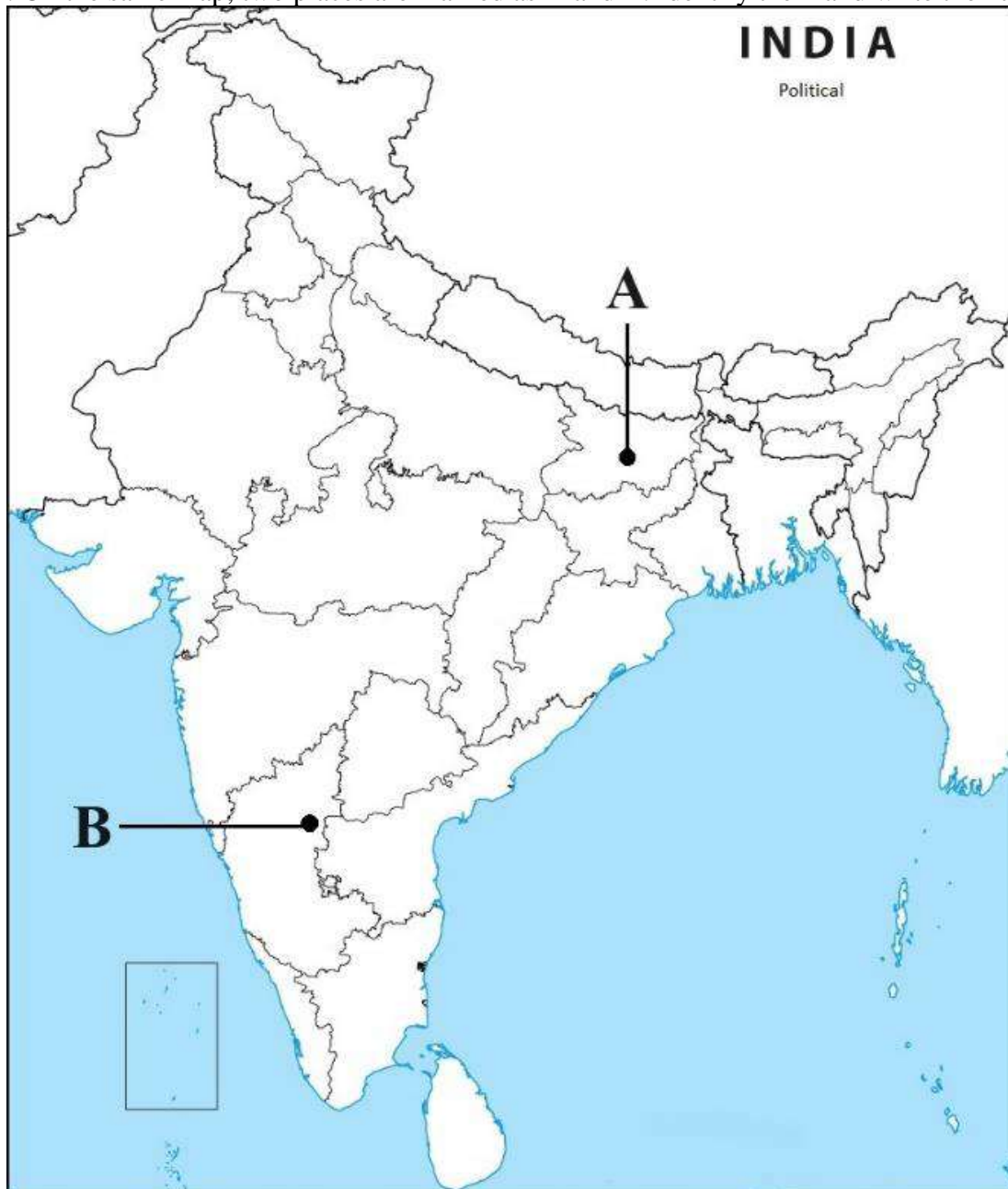
D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF-YEARLY EXAMINATION
SESSION 2024-2025

CLASS: XII   **MAXIMUM MARKS: 60**
SUBJECT: LIBRARY AND INFORMATION SCIENCE   **TIME: 3 HOURS**

SECTION – A MCQ & ONE WORD ANSWERS
(EMPLOYABLITY SKILLS)   [ATTEMPT ANY 4]
1×4=4

1   Complete the following series : Sender-Encoding-_____ - Decoding- Receiver
    (a) Feedback   (b) Message   (c) Channel   (d) Information

2   _____ indicates to the speaker if you are listening carefully or not
    (a)Gesture   (b)Eye Contact   (c)Giving feedback   (d)All of the above

3   In the acronym RESPECT , P stands for _____
    (a)Proper eye contact   (b)Peer attention   (c)Pay attention   (d) None of the above

4   Identify the subject in the sentence "Raju and Ramesh booked a red cab."
    (a)Raju and Ramesh   (b) red   (c) booked   (d) a cab

5   FFM stands for _____
    (a) Four factor model   (b)Five factor model
    (c) Fifty five measures   (d)None of the above

6   What should be done to help someone overcome personality disorder?
    (a)Talking friendly with the individual   (b)Engage the individual with a new hobby
    (c)Help in building self confidence   (d)All the above

SECTION – B SHORT ANSWER TYPE QUESTIONS
(EMPLOYABLITY SKILLS)   [ATTEMPT ANY 3]
2×3=6

7   State any four techniques to maintain a positive outlook in the long run.

8   Describe any two types of personality disorders.

9   Give an example from your life that proves that you are self aware.

10   What are the stages in active listening?

11   What are the barriers to active listening?

SECTION – C MCQ (SUBJECT SPECIFIC SKILLS) [ATTEMPT ANY 26]
1×26=26

12   The concept of collection development came into existence in the year?
    (a) 1990s   (b) 1980s   (c) 1970s   (d) 1960s

13   Which two factors of collection development is considered being the most important out of the five factors of proper collection development?
    (a) Resource sharing &Weeding   (b) User analysis &Acquisition Policies
    (c) User analysis & Selection Policies   (d)Selection Policy& Acquisition Policies

14   _____is a list of publications on a searchable online platform.
    (a) National Bibliography   (b) Trade Bibliography
    (c) Book reviews   (d) Bibliographic database

15   Which General Financial Rules provides the guidelines regarding the stock verification of library books?
    (a) Rule 190   (b) Rule 192   (c) Rule 194   (d) Rule 196

16 In which approach to stock verification process, the books are verified based on shelf list?
(a) Call number approach   (b) Book number approach
(c) Accession number approach   (d) ICT approach

17 RFID stands for _____ ?
(a) Rapid Frequency Identifier   (b) Radio Fidelity Identifier
(c) Radio Frequency Identification   (d)Recorded Field Identification

18 FPBSA stands for _____ ?
(a) Forum of Publishers & Book Sellers Association in India
(b)Federation of Publishers & Book Sellers Association
(c) Federation of Publishers & Book Sellers Assembly in India
(d)Federation of Publishers & Book Sellers Association in India

19 What can be an expected rate of discount for purchase in case of a significant autographed copy of a book?
(a) 10%   (b) 15%   (c) 20%   (d) 0%

20 Which of the following provides scientific base for fixing wages and salaries of various types of jobs and employees?
(a) Strategic Choices   (b) Job Description
(c) Job Analysis   (d) Employee Classification

21 Indian books in print is an example of -
(a)National bibliographies   (b) Subject bibliographies
(c) Trade bibliographies   (d)Book reviews

22 How many columns are there in a library accession register for recording bibliographical details?
(a)12   (b) 14   (c)16   (d)18

23 Common Communication Format (CCF) was designed and promoted by-
(a)Library of Congress   (b) British Library
(c)National Library of Medicine   (d)UNESCO

24 ISBD stands for -
(a)Indian Standard Bibliographic Description
(b) International Standard Bibliographic Description
(c)Indian Standards Bibliographic Description
(d)International Standards Bibliographic Description

25 Who in the year 1967 gave the specifications for binding books?
(a)S.R. Ranganathan   (b)M. Dewey
(c) National Archives of India   (d)National Library of India

26 Cancellation and receiving of documents is the function of which section of a library?
(a)Circulation   (b)Acquisition   (c)Binding   (d) Preservation

27 The Three Card System for periodical maintenance was designed by -
(a) S.R. Ranganathan   (b) M. Dewey
(c) National Archives of India   (d) National Library of India

28 ASLIB stands for
(a)Association of Special Libraries
(b)Association of Special Libraries and Information Bureau
(c)Association for Information Management
(d)Association of School Libraries

29 Pre-order search to avoid duplicity as an activity of -

(a)Circulation   (b) Acquisition   (c)Binding   (d) Preservation

30 Connecting symbol for the fundamental category Energy is -

(a):   (b);   (c) ,   (d) '

31 ISBD(M) stands for :

(a) Monograph   (b) Maps   (c) Manual   (d)Manuscript

32 MARC 21 tag for ISBN is -

(a)020   (b)110   (c)130   (d) 246

33 What is the ideal temperature range for a library?

(a)10c-20c   (b)20c-30c   (c)20c-25c   (d)25c-30c

34 The relative humidity inside a library should be kept between –

(a) 30%-40%   (b) 20%-25%   (c) 25%-30%   (d)35%-40%

35 How many characters are there in the leader section of a MARC record?

(a) 24   (b) 21   (c) 22   (d) 23

36 The call number of a document consists of :

(a) Class Number + Book Number + Collection Number

(b) Class Number + Subject Number + Collection Number

(c) Document Number + Book Number + Collection Number

(d) Class Number + Book Number + Author Number

37 Dr. Ranganathan has prescribed a procedure involving _____ successive steps for translating the title of the document.

(a) Nine   (b) Five   (c) Ten   (d) Seven

38 In a call number, what does an underlined book number signify?

(a) Rare Book   (b)Oversized book   (c) Undersized book   (d) Textbook

39 Which classification scheme is of Indian origin?

(a)LCC   (b)DDC   (c)UDC   (d) CC

SECTION – D SHORT ANSWER   TYPE   QUESTIONS - 1
(SUBJECT SPECIFIC SKILLS) [ATTEMPT ANY 3]

2×3=6

40 What do you mean by Routing Slip Method?

41 States the rules of stock verification as per GFR for less than 20,000 books, more than 20,000 books and more than 50,000 books.

42 Differentiate between Job Analysis and Job Evaluation.

43 Discuss the staffing pattern of big government libraries.

44 State any four functions of circulation section.

SECTION – E SHORT ANSWER TYPE QUESTIONS - 2
(SUBJECT SPECIFIC SKILLS) [ATTEMPT ANY 2] (*Answer in 120 words*)

3×2=6

45 What is meant by staffing in HRM? What sub-factors does it contain?

46 What is a periodical? State the functions of periodical section in a library.

47 Write a note on the different types of book binding.

SECTION – F DESCRIPTIVE/LONG ANSWER TYPE QUESTIONS
(SUBJECT SPECIFIC SKILLS) [ATTEMPT ANY 3](*Answer in 150 words*)

4×3=12

48   State the biological factors for damage of printed library materials.

49   What is meant by human factors for damage of printed materials? State the ways of preventing the damage of printed materials by human factors

50   Discuss field tag, indicators & sub-field code of MARC 21.

51   Explain the methods of stock verification.

52   What are the minimum required fields for book cataloguing in MARC 21? State any 9 fields along with their tag numbers.

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D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

CLASS: XII   **MAXIMUM MARKS: 80**
SUBJECT: MATHEMATICS   **TIME: 3 HOURS**

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

i) This question paper contains 38 questions and 04printed pages. All questions are compulsory.
ii) This question paper is divided into five sections- A,B,C,D and E.
iii) In section A, Questions no. 1 to 18 are multiple choice questions
iv) (MCQs) and questions number 19 and 20 are Assertion-reason based questions of 1 mark each.
v) In section B, Questions no. 21 to 25 are short answer-I (SA-I) type questions, carrying 2 marks each.
vi) In section C, Questions no. 26 to 31 are short answer-II (SA-II) type questions, carrying 3 marks each.
vii) In section D, Questions no. 32 to 35 are long answer (LA) type questions, carrying 5 marks each.
viii) In section E, Questions no. 36 to 38 are case study based questions, carrying 4 marks each.
ix) 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 2 questions in Section E.
x) Use of calculators is not allowed.

SECTION A
This section comprises multiple choice questions (MCQs) of 1mark each.

01 Let A={0,1} and N be the set of natural numbers. Then the mapping f: N→ A defined by f(2n-1)= 0, f(2n)= 1 for all n∈N , is   1

(a)one-one   (b)onto   (c) a bijection   (d)one-one but not onto

02 The number of reflexive relations on a set A consisting of n elements is equal to   1

(a) 2^{n^2} .   (b) n^2 .   (c) $2^{n(n-1)}$ (d) n^2-n.

03 If the area of an expanding circular region increases at a constant rate with respect to time, then the rate of increase of the perimeter with respect to the time   1

(a)varies directly as radius   (b)varies directly as square of the radius
(c) varies inversely as radius   (d) remains constant

04 The domain of the function f defined by f(x) = $\sin^{-1} \sqrt{x-1}$ is   1

(a) [1,2]   (b) [-1,1]   (c) [0,1]   (d) [-1,0]

05 Let $\theta = \sin^{-1}\{\sin(-600^0)\}$, then the value of θ is   1

(a) $\frac{2\pi}{3}$ (b)$\frac{-2\pi}{3}$ (c)$\frac{\pi}{3}$ (d)$\frac{\pi}{2}$

06 The value of $\cot\{\cos^{-1}\left(\frac{7}{25}\right)\}$ is   1

(a) $\frac{25}{24}$ (b)$\frac{25}{7}$ (c) $\frac{24}{25}$ (d)$\frac{7}{24}$

07 If A = $[a_{ij}]$ is a square matrix of order 3 such that $a_{ij} = i^2 - j^2$, then A is   1

(a) a skew symmetric matrix   (b) a symmetric matrix
(c) a scalar matrix   (d) an identity matrix

1

08   If a matrix has 6 elements, then the number of possible orders of   The matrix can be   1

    (a) 2   (b) 4   (c) 3   (d) 6

09   If A (Adj A) = $\begin{bmatrix} 3 & 0 & 0 \\ 0 & 3 & 0 \\ 0 & 0 & 3 \end{bmatrix}$, then $\left| A \right| + \left| (\text{Adj A}) \right| =$ 1

    a)   12   b) 9   c)   3   d) 27

10   Function $f(x) = \begin{cases} x - 1, & x < 2 \\ 2x - 3, & x \ge 2 \end{cases}$ is a continuous function   1

    (a) for all real values of x   (b)   for x=2 only
    (c) for all real values of x such that x≠ 2   (d)for all integral values of x

11   The set of points of discontinuity of the function f(x) = x-$[x]$, is   1
    (a) Q(Set of all rational numbers   (b)R(Set of all reals)
    (c)N (Set of all naturals)   (d) Z(Set of all integers)

12   The derivative of f(x) = $|x - 1| + |x - 3|$ at x=2 is   1
    (a) 0   (b) -2   (c) 2   (d) 1

13   If $e^{y}(x + 1) = 1$, then which of the following is true?   1

    (a) $\frac{d^2y}{dx^2} = \left(\frac{dy}{dx}\right)^2$ (b) $\frac{d^2y}{dx^2} = \frac{dy}{dx}$ (c) $\left(\frac{d^2y}{dx^2}\right)^2 = \left(\frac{dy}{dx}\right)^2$ (d) $\frac{d^2y}{dx^2} = -\frac{dy}{dx}$

14   The function f(x) = x^x has a stationary point at   1

    (a)   x=e   (b)   x=$\frac{1}{e}$ (c)   x=1   (d) x= $\sqrt{e}$

15   The function f(x) = $\tan x - x$ 1
    (a) always increases   (b) always decreases
    (c) never increases   (d) can't be determined

16     $\int e^{x} \sec x \, (1+ \tan x) \, dx$ equals   1
    (a)$e^{x} \cos x$ +C   (b)$e^{x} \sec x$ +C   (c)$e^{x} \sin x$ +C   (d) $e^{x} \tan x$ +C

17   Anti-derivative of $\frac{\tan x - 1}{\tan x + 1}$ with respect to x is   1

    (a) $sec^2 \left(\frac{\pi}{4} - x\right)$ +C   (b) - $sec^2 \left(\frac{\pi}{4} - x\right)$ +C

    (c) $\log \left|\sec \left(\frac{\pi}{4} - x\right)\right|$ +C   (d) - $\log \left|\sec \left(\frac{\pi}{4} - x\right)\right|$ +C

18   If $\frac{d}{dx}\{f(x)\} = \log x$, then f(x) equals   1

    (a) $-\frac{1}{x} + C$ (b)   x($\log x - 1$) +C

    (c) x($\log x + 1$) +C   (d) $\frac{1}{x} + C$

ASSERTION-REASON BASED QUESTIONS

In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.
    (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
    (b) Both (A) and (R) are true but (R) is not the correct explanation of (A).
    (c) (A) is true but (R) is false.
    (d) (A) is false but (R) is true.

19   Assertion (A):- Let A and B be two symmetric matrices of order 3. A(BA) and (AB)A are   1
               symmetric matrices.
    Reason (R):- AB is symmetric matrix if matrix multiplication of A and B is commutative.

20   Assertion (A):-The maximum value of the function f(x) = x^5 , x∈ $[-1,1]$ is not attend at its   1
               critical point, x=0.
    Reason (R):- The maximum of a function can only occur at points where derivative is zero.

SECTION B
This section comprises short answer-I (SA-I) type questions of 2 marks each.

21 Evaluate: $\tan^{-1}\left[2\cos\left(2\sin^{-1}\frac{1}{2}\right)\right]$ 2

22 Find a matrix X such that 2A+B+X=O, where A= $\begin{bmatrix} -1 & 2 \\ 3 & 4 \end{bmatrix}$, B= $\begin{bmatrix} 3 & -2 \\ 1 & 5 \end{bmatrix}$ and O is the null   2

matrix of order 2×2.

23 Evaluate: $\int \frac{\sin(x-a)}{\sin(x+a)}dx$ 2

24 If $x = \theta\sin\theta$, $y= \theta\cos\theta$, find $\frac{dy}{dx}$ at $\theta = \frac{\pi}{4}$.   2

OR

Write the derivative of $\sin x$ with respect to $\cos x$.

25 Find $\int \frac{dx}{1+sinx}$.   2

OR

Integrate: $\int \frac{dx}{1 + e^x}$

SECTION C
This section comprises short answer-II (SA-II) type questions of 3 marks each.

26 Let R be a relation in A×A defined by (a, b) R (c, d) iff a+ d=b+ c, for   3

(a, b) , (c, d) ∈A×A .Prove that R is an equivalence relation.

OR

Show that the function f in A =R-$\{\frac{2}{3}\}$ defined as f(x) = $\frac{4x+3}{6x-4}$ is one one and onto.

27 Find $\int \frac{2x+1}{\sqrt{3+2x-x^2}}dx$ 3

28 A ladder 5 m long is leaning against a wall. The bottom of the ladder is pulled along the   3
ground, away from the wall, at the rate of 2 cm/s. How fast is its height on the wall
decreasing when the foot of the ladder is 4 m away from the wall?

OR

Find the intervals for which the function f(x)= 2+3x- x³is decreasing.

29 Find the value of k, so that the function f is continuous at x =$\frac{\pi}{2}$.   3

$f(x) = \begin{cases} \frac{k\cos x}{\pi-2x}, & if\ x \neq \frac{\pi}{2} \\ 5, & if\ x = \frac{\pi}{2} \end{cases}$.

30   3

Show that the function f defined by f(x) =$\begin{cases} 3x - 2\ , & if\ 0 < x \leq 1 \\ 2x^2 - x & ,if\ 1 < x \leq 2 \\ 5x - 4 & ,if\ x > 2 \end{cases}$ is not differentiable at

x=2.

31 $Evaluate: \int \frac{sinx + cosx}{\sqrt{sin2x}}$ 3

OR

$Evaluate: \int \tan^{-1} x$ dx.

SECTION D
This section comprises long answer (LA) type questions of 5 marks each.

32 If A=$\begin{bmatrix} 1 & 3 & 3 \\ 1 & 4 & 3 \\ 1 & 3 & 4 \end{bmatrix}$, verify that A(adjA)= $|A|$I. Also, find A⁻¹.   5

33   Differentiate $x^{\sin x} + (\sin x)^{\cos x}$ w.r.t. x.   5

OR

If $y = \left(\sqrt{x+1} + \sqrt{x-1}\right)^m$, then prove that $(x^2 - 1)y_2 + xy_1 = \frac{1}{4}m^2 y$.

34   A figure consists of a semi-circle with a rectangle on its diameter. If the perimeter of the   5
figure is P, then find its dimensions in order that the area may be maximum.

35   Find $\int \frac{\sec x}{1 + cosec\, x} dx$ 5

OR

Find $\int \left[\log(\log x) + \frac{1}{(\log x)^2}\right] dx$

SECTION E

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

Case Study-1

36   **Read the following passage and answer the questions given below.**
The temperature of a person during an intestinal illness is given by
f(x) = -0.1x²+mx+98.6 , $0 \le x < 12$, m being a constant , where f(x) is the temperature in ⁰F
at x days.

(i)   Is the function differentiable in the interval (0,12).? Justify your answer.
(ii)   If 6 is the critical point of the function, then find the value of the constant m.   1
(iii)   (a) Find the intervals in which the function is strictly increasing/strictly decreasing   1

OR   2

(b) Find the points of local maximum/local minimum, if any, in the interval (0,12)
as well as the points of absolute maximum/absolute minimum in the interval [0,12]. Also,
find the corresponding local maximum/local minimum and the absolute maximum/absolute
minimum values of the function.

Case Study-2

37   **Read the following passage and answer the following questions.**
Gautam buys 5 pens, 3 bags and 1 instrument box and pays a sum of Rs. 160. From the same
shop, Vikram buys 2 pens, 1 bag and 3 instrument boxes and pays a sum of Rs. 190. Also
Ankur buys 1 pen, 2 bags and 4 instrument boxes and pays a sum of Rs. 250.

(i)   Convert the given above situation into a matrix equation of the form AX=B   1
(ii)   Find $|A|$.   1
(iii)   (a) Find A⁻¹   2

OR

(b) Determine P=A²-5A.

Case Study-3

38   **Read the following passage and answer the following questions.**
Dhanush wants take a test of his son Amit who is a student of class XII. Dhanush said
to Amit , "Observe the two functions f(x) and g(x) carefully" f: R→R , g : R→R such
that f(x)= x , g(x)= x²
Dhanush asked some questions related to f(x) and g(x) and Amit answered correctly.
Write the correct response given by Amit of the following questions.
(i)Check whether f(x) is bijective or not.   2
(ii)Check whether g(x) is bijective or not.   2

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D.A.V. INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION 2024-2025

CLASS: XII   **MAXIMUM MARKS: 70**
SUBJECT: PHYSICAL EDUCATION (048)   **TIME ALLOWED: 3 HOURS**

General Instructions: -
- Please check that this question paper contains **08** printed pages.
- Please write down the serial number of the question in the answer-book before attempting it.
- 15 minutes time has been allotted to read this question paper. The students will read the question paper only during this time and will not write any answer on the answer-book during this period.
- The question paper consists of **5** sections (A, B, C, D, and E) and **37** Questions.
- *Section - A* consists of question **1 – 18** carrying **1** mark each and is multiple choice questions. **All** questions are compulsory.
- *Section - B* consist of questions **19 – 24** carrying **2** marks each and are Very Short Answer types and should not exceed **60-90** words. Attempt any **5.**
- *Section - C* consist of Question **25 – 30** carrying **3** marks each and are Short Answer types and should not exceed **100-150** words. Attempt any **5.**
- *Section - D* consists of Question **31 – 33** carrying **4** marks each and are case studies. There is internal choice available.
- *Section - E* consists of Question **34 – 37** carrying **5** marks each and are Long Answer types and should not exceed **200-300** words. Attempt any **3.**

SECTION – A

1. Arrange the Olympic Games in ascending order of the year they were first held, and find out the correct combination code.   **1**
     I.   Special Olympics
    II.   Paralympic Games
   III.   Youth Olympics
    IV.   Deaflympics
     V.   Summer Olympics
    VI.   Special Olympics Bharat

   Codes
   {a} V, IV, II, I, VI, III   {b} V, II, I, IV, VI, III
   {c} V, I, VI, IV, II, III   {d} V, VI, IV, II, I, III

2. Bhujangasana can prevent as well as cure   **1**
   {a} Obesity, and Diabetes only
   {b} Diabetes, and Asthma only
   {c} Hypertension, Diabetes, and Asthma only
   {d} Diabetes, Asthma, Hypertension, Back-Pain, and Arthritis only

3. Given below are the two statements labelled as Assertion (A) and Reason (R).   **1**
   Assertion (A): Lordosis is treatable by doing the Bhujangasana and Tadasana.
   Reason (R): These asanas strengthen the muscles and help maintain the balance of the body.
   In the context of the above two statements, which one of the following is correct?
   {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

4. Identify the picture, and find out the correct option: **1**
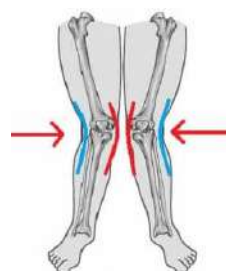
   {a} Flatfoot   {b} Genu Valgum   {c} Genu Varum   {d} Both {B}, and {C}

5. In the British method the winner is decided in a league tournament, find out the correct formula of this method. **1**

{a} $\dfrac{\text{Total points obtained}}{\text{Maximum possible points}}$

{b} $\dfrac{\text{Total matches won}}{\text{Total number of matches played}}$

{c} $\dfrac{\text{Total points obtained X 100}}{\text{Maximum possible points}}$

{d} $\dfrac{\text{Total matches won X 100}}{\text{Total number of matches played}}$

6. Which chronic condition can result in renal failure, vision loss, amputation of extremities, and cardiovascular problems if not properly managed through lifestyle modifications and treatment?

1

{a} High BP   {b} Diabetes
{c} Asthma   {d} All of these

7. Match List I with List II and select the correct answer from the code given below: **1**

List I		List II	
I	Vitamin B_5	1	Folic Acid
II	Vitamin K	2	Phylloquinone
III	Vitamin C	3	Pantothenic Acid
IV	Vitamin B_9	4	Ascorbic Acid

Codes

	I	II	III	IV
{a}	4	2	3	1
{b}	3	2	4	1
{c}	4	1	3	2
{d}	3	2	1	4

8. Select the wrong statements and find the correct combination code. **1**
   I. Glycogen is a simple carbohydrate.
   II. Polysaccharides are not sweet in taste.
   III. Maltose is soluble in water.
   IV. Cellulose is an example of a complex carbohydrate.
   V. Simple carbohydrates have a larger chain of chemical compositions in comparison to complex carbohydrates.

   Codes
   {a} V, and II only   {b} V, and I only
   {c} IV, and II only   {d} III, and I only

9. Select the correct statements and find the correct combination code. **1**
   I. Amenorrhoea is the first menstrual bleeding that a young girl has.
   II. When menstruation happens with severe pain or frequent menstrual cramps, the condition is called dysmenorrhea.
   III. Secondary amenorrhoea is characterized by delayed menarche which is the onset of the first period during puberty.
   IV. Osteoporosis is characterized by low bone mineral content.

   Codes
   {a} II, and IV only   {b} IV, and I only
   {c} II, and III only   {d} III, and I only

10. If you want to visit the International Paralympic Committee's (IPC) headquarters, you should book your ticket to **1**
   {a} Rome, Italy   {b} Brussels, Belgium
   {c} Tokyo, Japan   {d} Bonn, Germany

11. Given below are the two statements labelled as Assertion (A) and Reason (R). **1**
    Assertion (A): The word 'paralympic' is derived from a Greek word that means other than or parallel to the Olympics.
    Reason (R): It means the Paralympic Games are beside or alongside the Olympics.
    In the context of the above two statements, which one of the following is correct?
    {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

12. If your school is going to host DAV Sports – 2024 (National Level) Knock-out football tournament with 21 teams, then what will be the formula to find out the number of matches in the 1st round? **1**
    {a} N – 1
    {b} $\frac{N(N-1)}{2}$

    {c} $\frac{N-NB}{2}$
    {d} N (N – 1)

13. Calculate the BMI of a girl and identify the category if her weight is 68 kg and height is 164 cm. **1**
    {a} Underweight
    {b} Normal weight
    {c} Overweight
    {d} Obesity class I

14. Match List I with List II and select the correct answer from the code given below: **1**

List I		List II	
I	To reduce the chances of mistake	1	Pre-planned training programme
II	To improve performance	2	Backup plan
III	Planning	3	Everyone shall know his duty in advance
IV	To facilitate Co-ordination	4	It is a preparation for any action

    Codes

	I	II	III	IV
{a}	2	1	3	4
{b}	3	2	1	4
{c}	3	1	2	4
{d}	2	1	4	3

15. Which one of the following asanas is ***not*** a remedial asana for treating back pain and arthritis? **1**
    {a} Dhanurasana
    {b} Saral Matsyendrasana
    {c} Bhadrasana
    {d} Ushtrasana

16. Match the contents given below: **1**

List I	List II
1. Short stature	a. an impairment that consist of a lack of coordination of muscle movements.
2. Hypertonia	b. characterized by unbalanced, involuntary movements & a difficulty maintaining a symmetrical posture.
3. Ataxia	c. abnormal increase in muscle tension.
4. Athetosis	d. Standing height is reduce due to shortened legs, arm &trunk.

    {a} 1-b, 2-c, 3-a, 4-d
    {b} 1-a, 2-b, 3-d, 4-c
    {c} 1-d, 2-c, 3-a, 4-b
    {d} 1-c, 2-a, 3-b, 4-d

17. A sportsperson is eligible to participate in Deaflympics who is having hearing loss of **1**
    {a} 25 dB or lesser
    {b} 55 dB or greater
    {c} 15 dB to 45 dB
    {d} 25 dB to 45 dB

18. A junior student in your school having Scoliosis, you must advise the best remedy to cure this postural deformity, such as **1**
    {a} Horse-riding
    {b} Rope skipping with heels
    {c} Swim by using breaststroke technique
    {d} All of these

SECTION – B

19. "Let me min. But if I cannot win, let me be brave in the attempt." Justify. **2**
20. Differentiate between Intramural and Extramural with an example. **1+1**
21. Discuss any two fat-soluble vitamins based on their sources and benefits. **1+1**
22. On the occasion of International Day of Yoga, you are going to demonstrate the 'Yoga mudra' and mention the procedure step by step.

<div align="center">OR</div> **2**

Many girls deny their eating disorders due to embarrassment, and shame. Discuss any two eating disorders. **1+1**

23. India should emphasize for effective implementation of inclusive education. Share your view on the implementation of inclusive education. **2**

SECTION – C

24. Discuss the importance of protein in a weightlifter's diet. **3**
25. Geeta wanted to learn archery but her family was opposed to it. Then her father spoke with her Physical Education teacher who supported Geeta and she won a medal at the DAV National Sports – 2024. **1+1+1**

Based on this case study answer the following questions:

25.1. The major reason that the family discourages Geeta

{a} Lack of physical fitness {b} Lack of personal safety
{c} Lack of Self-confidence {d} Lack of sports infrastructure

25.2. What values were shown by her father?

{a} Gender equality {b} Confidence in his child
{c} Open-mindedness {d} All of these

25.3. The percentages of women participation in the 2000 Sydney, New South Wales, Australia Olympics featured at least 300 events in its official sports program.

{a} 38.2 percent {b} 42.4 percent
{c} 28.2 percent {d} 24.4 percent

26. Mention the steps and prepare a cyclic league fixture of 7 teams. **3**
27. What is the difference between menarche and amenorrhea? **3**

<div align="center">OR</div>

Write a short note on International Silent Games. **3**

28. Today you are going to take part in the football competition, as a sportsperson which diet you should take during the competition. **3**

SECTION – D

29. Raman is a student of class XII and is suffering from a disease. He has triggered coughing, wheezing, and shortness of breath. During a recent medical checkup at school, he was advised to practice yoga and participate in sports activities to cure it. He consulted the yoga instructor at the school for further guidance. **4**

Based on this case study answer the following questions:

29.1. Raman is suffering from which lifestyle disease?

29.2. Find out the major causes of this disease.

29.3. The yoga instructor at the school has asked Raman to perform at least two pranayama, what is the name of these two pranayama?

29.4. Suggest a few medications that can be used for this disease.

30. In relation to pictures, answer the following questions: **4**
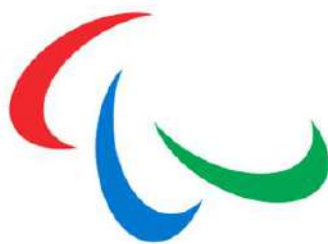
A   **B**   **C**

30.1. Identify the image of symbols/logos and write their names.
30.2. Which logo is a symbol of growth, confidence, and joy among children and adults with disabilities?
30.3. According to figure 'C' officially known by its current name, it was adopted in which year?
30.4. According to figure 'A' it was established in which year?

OR

According to figure 'A' what is the moto?

31. In relation to pictures, answer the following questions: **4**
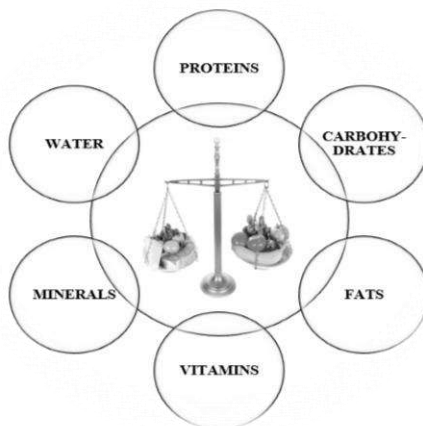
31.1. Every sportsperson does not require the same type of diet. Why?
31.2. Enlist the non-nutritive components of the diet.
31.3. Create a flow chart on the various types of fats.
31.4. Write down all the water-soluble vitamins.

SECTION – E

32. Diagrammatically represent a knockout fixture of 19 teams and mention all calculations and steps involved. **5**
33. 'Nowadays yoga plays a very important role in cure of various diseases.' Justify the statement by giving suitable examples of any two asanas for diabetes with the help of a stick diagram. **5**

OR

What do you mean by Hypertension. Explain any two asanas relating to hypertension, its procedure, benefits and contraindications

34. Discuss in detail about the Spinal Curvature. **5**

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CLASS : XII   **MAXIMUM MARKS : 30**
SUBJECT : PAINTING   **TIME : 2 HOURS**

General Instructions

- Section – A : Attempt all Questions (Each Question will carry 1 mark)
- Section – B : Attempt all Questions (Each Question will carry 2 marks)
- Section – C : Attempt any two Questions (Each Question will carry 6 marks)

Section – A
(Multiple Choice Questions)   8 X 1 = 8

1. A) In which sub-school are the famous miniature painting "Krishna on Swing" made ?   1
   a) Jodhpur   b) Bikaner
   c) Kishangarh   d) Jaipur

   B) Which style is now accepted as the cradle of Pahari painting ?   1
   a) Kangra painting   b) Guler painting
   c) Chamba painting   d) Basohli painting

   C) The painting "Bharat Meets Rama at Chitrakuta" from the Ramayana theme executed   1
   under the Patronage of ……………………….. during the middle of the 18th century is a unique
   painting of his time.
   a) Raja Raj Singh   b) Sawai Jai Singh
   c) Sawai Pratap Singh   d) Maharaja Sawai Singh

   D) Which is the greatest and earliest manuscript in the Mughal period ?   1
   a) Babur Nama   b) Taimur Nama
   c) Shah Nama   d) Dastan-i-Amir-Hamza

   E) Whose period was known as the "Golden Age of Kangra school of miniature painting" ?   1
   a) Raja Sansar Chand   b) Raja Ghamand Chand
   c) Raja Suresh Chand   d) Raja Tek Chand

   F) In the following question a statement of Assertion (A) is followed by a statement of Reason(R).
   Mark the correct choice as :   1
   Assertion (A) : The headman gave out the order while the chief artist did the actual layout,
   after that lesser artists did the figure and painted the background and so on till the painting
   was finished.
   Reason (R) : No painting was done by a single artist, but was a collective effort of two to
   five artists.
   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 and (R) is True

   G) Match the following :   1
   A) Krishna on Swing   i) 1730 A.D.
   B) Krishna Lifting the Mount Govardhana   ii) 1683 A.D.
   C) Krishna with Gopis   iii) 1760 A.D
   D) Radha (Bani-Thani)   iv) 1585 - 90 A.D.

a) A-i, B-iv , C-ii, D-iii   b) A-iii, B-ii, C-i, D-iv

c) A-ii, B-iv, C-i, D-iii   d) A-iv, B-ii, C-iii, D-i

H) Match the following :   1

    A) Nazum-ul-ulm   i) Vishnu Sharma

    B) Rasamanjari   ii) History of the World

    C) Panchatantra   iii) Science of the stars

    D) Tarik-i-Alfi   iv) Bhanudatta

a) A-ii, B-iv, C-iii, D- i   b) A-iii, B-iv, C- i, D- ii

c) A-iv, B-iii, C- ii, D-i   d) A-i, B- iv, C-iii, D-ii

Section – B
(Short answer type questions)
(Answer for these questions is expected in around 100 words)

2. a)Write a short note on the subject matter of the Mughal miniature painting "Falcon on a Bird-Rest" which is included in your course of study.   2

Or

   b) Mention any two main features of Kangra paintings.

3. a) Describe the compositional arrangement of the Mughal schools of miniature painting "Krishna Lifting the Mount Govardhana".   2

Or

   b) Mention any two salient features of the Deccan schools of miniature painting.

4. a) Describe the artistic aspects of the Deccan miniature painting "Chand Bibi Playing Polo (Chaugan)".   2

5. Appreciate the painting "Maru-Ragini" based on the following points: ½ + ½ + ½ + ½ = 2
   a) Name of the Artist   b) Medium of the painting
   b) Name of the Sub-school   c) Circa

6. Evaluate the aesthetic-grandeur of the famous Rajasthani miniature painting "Radha (Bani-Thani)" 2

   Which is included in your course of study.

Section – C
(Long answer type questions)
(Answer for these questions is expected in around 250 words)

7. Explain the Compositional arrangement and Subject matter of the Pahari miniature painting "Krishna with Gopis" Which is included in your course of study.   6

8. How far has the painter been successful in depicting the subject-matter and compositional arrangement of any of the following miniature paintings: Give your appropriate reasons on the basis of the aesthetical parameters.   6
   a) Marriage Procession of Dara Shikoh
   b) Hazrat Nizamuddin Auliya and Amir Khusro

9. Write an essay on the origin and development of Mughal schools of miniature painting.   6

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D.A.V INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION – 2024-2025

CLASS: XII   **MAXIMUM MARKS: 70**
SUBJECT: PHYSICS   **TIME: 3 HOURS**

General Instructions:

Read the following instructions very carefully and strictly follow them:

*(i) This question paper contains 33 questions. **All** questions are **compulsory.***

*(ii) This question paper is divided into **five** sections – **A, B, C, D** and **E**.*

*(iii) In **Section A** – Questions no. **1** to **16** are Multiple Choice (MCQ) type questions, carrying **1** mark each.*

*(iv) In **Section B** - Questions no. **17** to **21** are Very Short Answer (VSA) type questions, carrying **2** marks each.*

*(v) In **Section C** - Questions no. **22** to **28** are Short Answer (SA) type questions, carrying **3** marks each.*

*(vi) In **Section D** - Questions no. **29** and **30** are case study based questions, carrying **4** marks each.*

*(vii) In **Section E** - Questions no. **31** to **33** are Long Answer (LA) type questions, carrying **5** marks each.*

(viii) There is no overall choice given in the question paper. However, an internal choice has been provided in one question of 2 marks,1question of 3marks, 1 question in each of the case study-based questions and all the 3 questions of 5 marks. You have to attempt any one of them.

You may use the following values of physical constants wherever necessary:

$c = 3 \times 10^8$ m/s

$h = 6.63 \times 10^{-34}$ Js

$e = 1.6 \times 10^{-19}$ C

$\mu_0 = 4\pi \times 10^{-7}$ Tm/A

$\epsilon_0 = 8.85 \times 10^{-12}$ C^{2}N^{-1}m^{-2}

$\frac{1}{4\pi\epsilon_0} = 9 \times 10^9$ Nm^{2}C^{-2}

Mass of electron (m_e) = 9.1×10^{-31} kg

Mass of neutron = 1.675×10^{-27} kg

Mass of proton = 1.673×10^{-27} kg

Avogadro number = 6.023×10^{23}

Boltzmann constant = 1.38×10^{-23} JK^{-1}

SECTION A

1. The equipotential surfaces due to an electric field in a region is shown in the figure below.   1
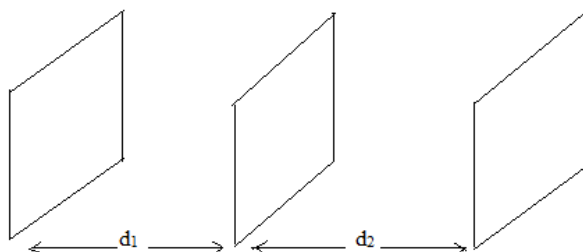
If $d_1 < d_2$, then the electric field in that region is

(a) increasing uniformly in magnitude upward along the length of the equipotential surfaces.

(b) decreasing uniformly in magnitude towards left.

(c) increasing uniformly in magnitude towards left.

(d) neither increasing nor decreasing at all.

2   Two identical point charges placed in a medium of dielectric constant 4 at a distance of r,   1
    experience an electrostatic force F. The force between them in vacuum for the same
    separation r will be,
    (a) F/4   (b) 2F   (c) F/2   (d) 4F

3   The variation of resistivity of nichrome wire with temperature in K can be represented as,   1
    (a)
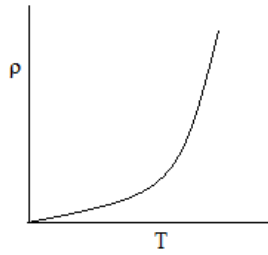
    (b)
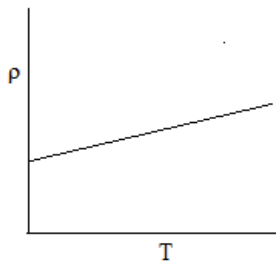
    (c)
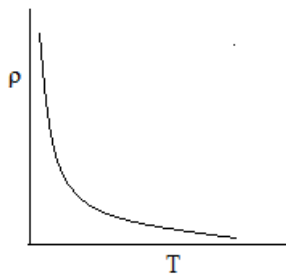
    (d)
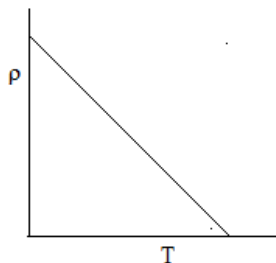
4   Two identical thick wires and two identical thin wires, all of the same material and of the   1
    same length form a square in four different ways E, F, G and H as shown. Due to the
    current in these loops the magnetic field at the centre of the loop will be zero in case of,
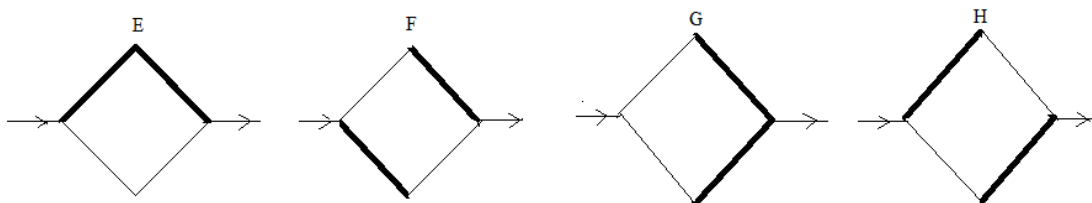
    (a) E and F only
    (b) F and H only
    (c) E and G only
    (d) F, G and H only

5   Two coils are placed close to each other. The mutual inductance of the pair of coils   1
     depends upon,
     (a) rate at which current change in the two coils.
     (b) currents in the two coils.
     (c) relative position and orientation of the two coils.
     (d) all of these mentioned in (a), (b) and (c).
6   The following figure shows the variation of intensity of magnetization I versus the   1
     applied magnetic field intensity H for two magnetic materials A and B.
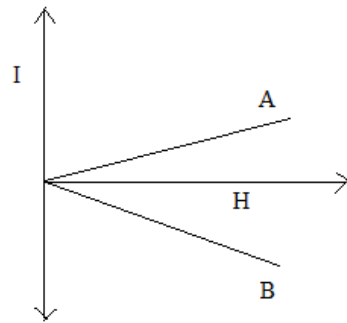
Which of the following graph correctly represents the variation of susceptibility versus
temperature for material B.
(a)
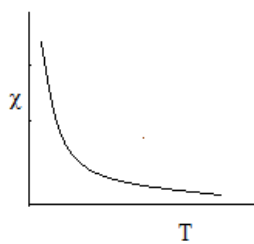
(b)
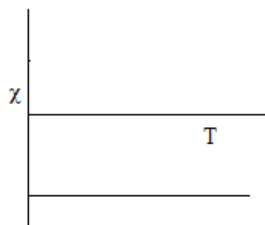
(c)
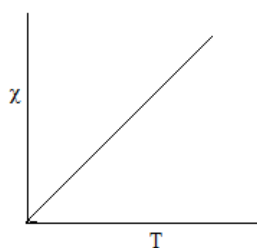
(d)
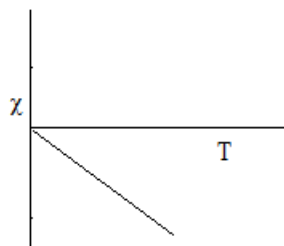
7   Two wires A and B, of the same material having length in the ratio 1:4 and diameter in   1
the ratio 3:2, are connected in parallel and a battery is connected across the combination.
The ratio of their resistances ($R_A : R_B$) and the potential differences across the two wires
($V_A : V_B$) are respectively,
(a) 9:1 and 1:9   (b) 1:9 and 1:1   (c) 1:9 and 1:9   (d) 9: 16 and 1:1

8   Two students P and Q calculate the charge flowing through a circuit. P concludes that   1
360 C charge flows in 1 minute and Q concludes that 3.75×10^{19} electrons flow in 1
second. If the current in the circuit is 6 A, then the correct calculation is done by,
(a) both P and Q   (b) only P   (c) only Q   (d) neither P nor Q

9   A welder wears special glasses to protect his eyes mostly from the harmful effect of   1
(a) ultraviolet rays
(b) X- rays
(c) infrared radiation
(d) very intense visible light

10   In an a.c circuit, instantaneous voltage and current are given as   1
V = 100 sin100t volt
I = 100 sin (100t + π/3) mA
The average power dissipated in the circuit is
(a) 5W   (b) 2.5 kW   (c) 2.5W   (d) 10^4 W

11   A wire of irregular shape in figure A and a circular loop of wire in figure B are placed in   1
different uniform magnetic field as shown in the figure.
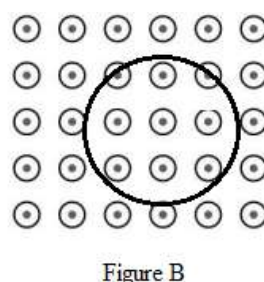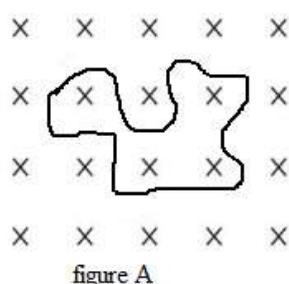
figure A   Figure B

The wire in figure A is turning into a circular loop as shown in figure C, and the loop in
figure B is turning into a narrow straight wire as shown in figure D.
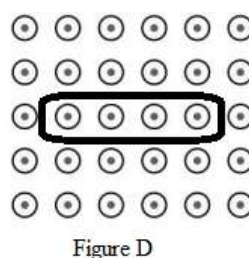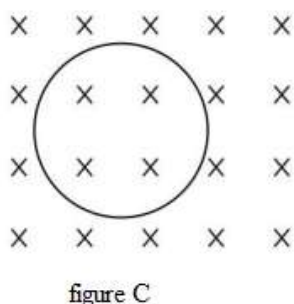
figure C   Figure D

The direction of induced current will be
(a) Clockwise in both figure C and figure D
(b) Anticlockwise in both figure C and figure D
(c) Clockwise in figure C and anticlockwise figure D
(d) Anticlockwise in figure C and clockwise figure D

12   A bar magnet AB with magnetic moment M is cut into two equal parts perpendicular to   1
its axis. One part is kept over the other so that end B is exactly over end A. The magnetic
moment of the combination so formed will be,
(a) M/4   (b) 3M/4   (c) M   (d) zero

Questions number **13** to **16** are Assertion(A) and Reason(R) type questions. Two statements are given – one labelled Assertion(A) and the other labelled Reason(R). Select the correct answer from the codes (A), (B), (C) and (D) as given below.

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

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

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

   D. Assertion (A) is false and Reason (R) is also false.

13   Assertion (A): A bar magnet experiences a torque when placed in a magnetic field.   1
        Reason (R): A bar magnet exerts a torque on itself due to its own magnetic field.

14   Assertion (A): Induced emf in two coils made of wire of same length and the same   1
        thickness, one of copper and another of aluminium is same. The current in copper coil is
        more than the aluminium coil.
        Reason (R): Resistance of aluminium coil is more than that of copper coil.

15   Assertion (A): A spherical balloon carries a positive charge that is uniformly distributed   1
        over its surface. As the balloon is blown up, the total electric flux coming out of the
        surface increases.
        Reason (R): With the increase in surface area of the balloon its surface charge density
        increases.

16   Assertion (A): If the frequency of alternating current in an AC circuit consisting of an   1
        inductance coil is increased then the current gets decreased.
        Reason (R): The current in this circuit always lags behind the alternating emf in phase.

<div align="center">

SECTION B

</div>

17   Two small identical electric dipoles AB and CD, each of dipole moment 'p' are kept at an   2
        angle of 120° as shown in the figure. Find the resultant dipole moment of this
        combination and the angle it makes with the X axis.

<div align="center">
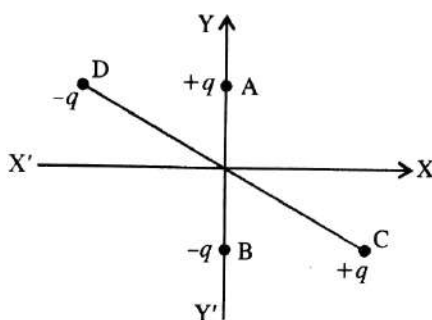
OR

</div>

        Two small conducting spheres A and B of radius r_1 and r_2 have charges q_1 and q_2
        respectively. They are connected by a wire. Obtain the expression for charges on A and
        B, in equilibrium.

18   Define mobility of a charge particle in a conductor and write its mathematical form. How   2
        does it vary with temperature for conductors?

19   (a) An EM wave is travelling in a medium with a velocity $v = v\hat{\imath}$. Draw a sketch showing   2
        the propagation of the EM wave, indicating the direction of the oscillating electric and
        magnetic fields.
        (b) How are the magnitudes of the electric and magnetic fields related to the velocity of
        the EM wave?

20 A galvanometer has 25 divisions and its resistance is 10 Ω. It gives a deflection of one division when a potential difference of 4 mV is applied across its terminals. How will you convert it into an ammeter of range 0 to 10 A? 2

21 (a) Plot a graph showing the variation of capacitive reactance with the frequency of the A.C. voltage applied across it. 2
(b) An electric lamp having coil of negligible inductance is connected in series with a capacitor and an a.c source. How does the brightness of the lamp change on reducing the capacitance? Justify your answer.

SECTION C

22 In the figure there are three infinite long thin sheets having surface charge density $+2\sigma$, -2σ and $+\sigma$ respectively. Give the magnitude and direction of electric field at the regions A, B and D. 3
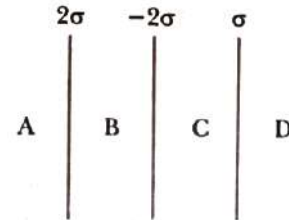
23 (a) Obtain an expression for electrostatic potential energy of a system of two charges q_1 and q_2 located at r_1 and r_2 respectively in an external field. 3
(b) Two similar positive point charges are placed separated by some distance. Draw the equipotential surfaces for this system.

24 The graph shown here shows the variation of terminal potential difference V, across a series combination of three identical cells versus current I. 3
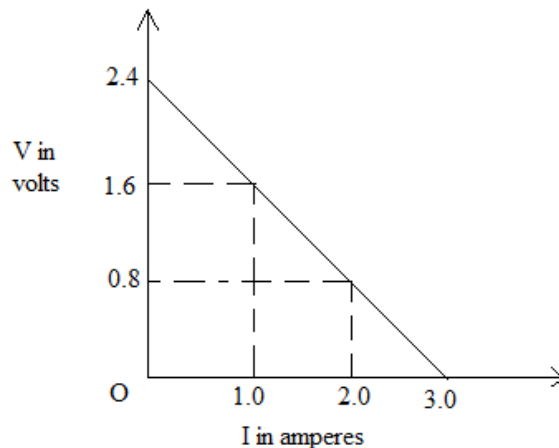
(a) Calculate the emf and internal resistance of each cell.
(b) If this cell combination is connected to an external resistance of 0.8 Ω then how much power will be dissipated through that external resistance.

OR

Find the value of the currents I_1 flowing in the given network. Also calculate the potential difference between the junctions B and E.
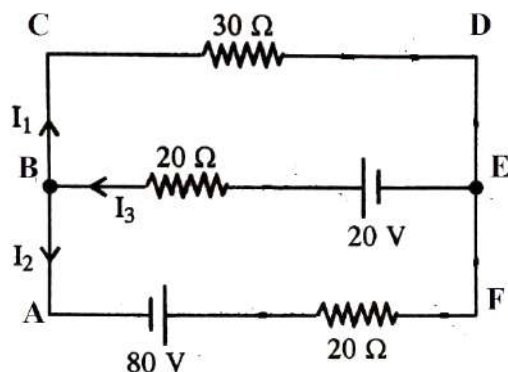
25   A long straight thick wire of a circular cross-section of radius 'a' carries steady current I.   3
The current is uniformly distributed across the cross-section. Apply Ampere's circuital law to calculate the magnetic field B(r) at a point in the region for
(i) r < a and (ii) r > a.
Also plot a graph showing the variation of magnetic field as a function of r.

26   (a) Identify the electromagnetic wave whose wavelength lie in the range 10^{-3}m < λ < 0.1   3
m. Mention one of its applications.
(b) Write the expression of displacement current. How is it different from conduction current?

27   A circular loop of conducting wire is placed in a time-varying magnetic field such that   3
the plane of the loop is perpendicular to the magnetic field. The graph below represents the variation of the magnetic field with time.
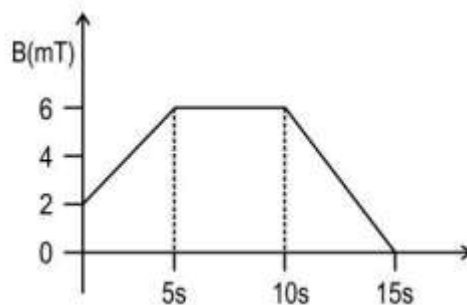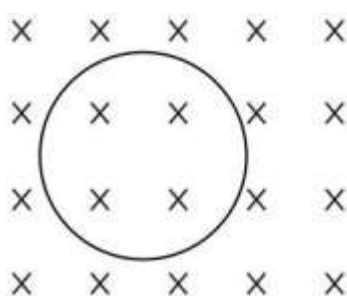
(a) In which time interval the induced current in the coil will be clockwise?
(b) If the area of the loop is 5 × 10^{-4} m², then calculate the induced emf in the coil for different time intervals,
(c) Graphically represent the induced emf as a function of time.

28   (a) The susceptibility of a magnetic material is 0.9853. Identify the type of magnetic   3
material. Draw the modification of the field line pattern on keeping a piece of this material in a uniform magnetic field.
(b) Mention two similarities between a bar magnet and a current carrying solenoid.

SECTION D
Case Study Based Questions

Questions number 29 and 30 are case study based questions. Read the following paragraphs and answer the questions that follow.

29   Dholu and Bholu are twin brothers. They decided to   4
perform some small experiments using two identical
parallel plate air capacitors each of capacitance 6µF. They
connected both the capacitors C_1 and C_2 with 12 V dc
source in separate circuit arrangements. After charging
both the capacitors Dholu disconnected the battery from C_1
and then inserted a dielectric slab of dielectric constant 4
to fill the space between the plates of the capacitor C_1
completely. Bholu also did same with C_2 but while inserting the slab he kept the 12V
battery connected with the capacitor.

(i) If E_1 and E_2 are the initial energy stored in the capacitors C_1 and C_2 before the insertion
of dielectric slab then after the insertion of the slab,

(a) E_1 increases and E_2 decreases.

(b) E_1 decreases and E_2 increases.

(c) Both E_1 and E_2 decreases.

(d) Both E_1 and E_2 increases.

(ii) If Q_1 and Q_2 are the charges stored inside the capacitors C_1 and C_2 respectively after
the insertion of dielectric slab then the ratio $Q_1 : Q_2 =$

(a) 1:2   (b) 1:4   (c) 1:1   (d) 2:1

(iii) A. Suppose after charging for some time Bholu also removed the battery from C_2 and
then they connect both the capacitors parallel to each other. The common potential across
the combination is now,

(a) 7.5 V   (b) 5V   (c) 8V   (d) 12V

OR

B. Suppose after insertion of the dielectric slab inside C_1 Dholu changes the plate
separation of C_1 to double of the previous. Now the capacitance of the capacitor becomes

(a) 12 µF   (b) 9 µF   (c) 9.6 µF   (d) 4.8 µF

(iv) Let E was the electric field between the plates of the capacitor C_2 before the insertion
of the dielectric slab and E' is same after the insertion of dielectric slab, then

(a) $E = E'$ (b) $E > E'$ (c) $E < E'$ (d) $E' = 0$

30   When a charge particle enters in a magnetic field with some velocity it experiences a   4
force. This force depends on the magnitude of charge(q), velocity of charge(v),
magnitude of the magnetic field(B) and the angle between the direction of movement and
$\vec{B}$. The vector form of this force can be given as, $\vec{F} = q(\vec{v} \times \vec{B})$. The magnetic field does
not exert any force on a charge particle at rest. The force is maximum when the charge
particle enters in the magnetic field region with a velocity perpendicular to the direction
of magnetic field. In this case the charge particle describes a uniform circular motion
where the necessary centripetal force is provided by the magnetic force acting on the
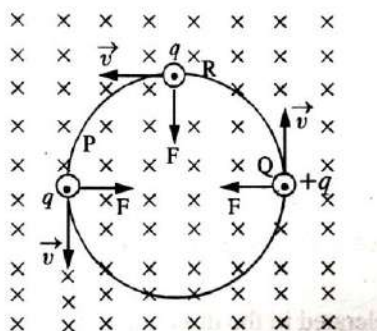
charge particle. The path of the charge particle and the direction of force acting on it due
to the presence of uniform magnetic field is shown in the figure below,

(i) A uniform magnetic field exists in the plane of the paper pointing from left to right as shown in the figure. In this field electron and proton move as shown in the figure. The electron and the proton experience
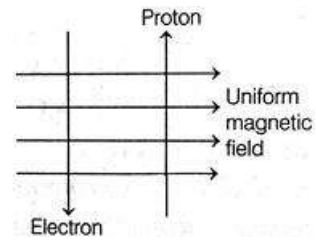
(a) Forces both pointing into the plane of the paper

(b) Forces both pointing out of the plane of the paper

(c) Forces pointing into the plane of the paper and out of the plane of the paper, respectively

(d) Forces pointing opposite and along the direction of the uniform magnetic field, respectively

(ii) If a moving charge particle makes an angle 45^0 with the direction of the magnetic field, then its trajectory will be

(a) helical   (b) straight line   (c) parabolic   (d) circular

(iii) For a given moving charge entering perpendicular to a uniform magnetic field, the variation of the radius of its circular path with its kinetic energy can be represented as,

(a)

(b)

(c)

(d)
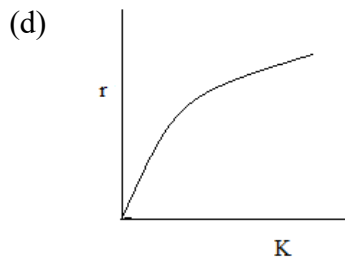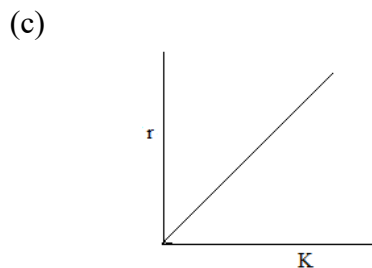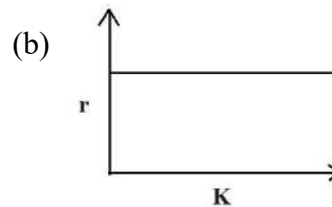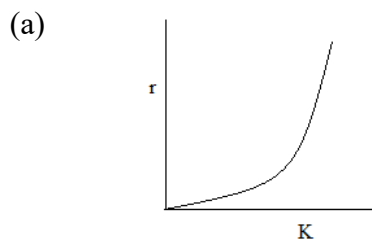
(iv) A. Two charge particles having same charge have the ratio of their masses 2:3 and ratio of their velocities 1:4. If they enter in a uniform magnetic field normal to the direction of field then the ratio of their time periods will be,

(a) 3:2   (b) 8:3   (c) 2:3   (d) 1:6

OR

B. A proton and an α-particle enter a uniform magnetic field moving with the same speed. If the proton takes 25 μs to make 5 revolutions, then the periodic time for the α-particle would be

(a) 50 μs   (b) 10 μs   (c) 25 μs   (d) 5 μs
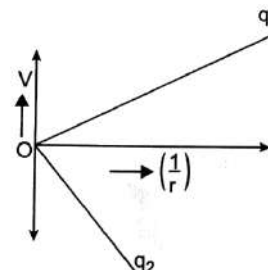
SECTION E

31   (a) An infinitely long positively charged straight wire has uniform linear charge density   5
λ. Using Gauss's law obtain an expression of electric field at a distance r from the wire.
(b) Suppose an electron of charge e is revolving around that wire mentioned in part (a) in a circular path of radius r such that the wire passes through the centre of the circular path and is perpendicular to its plane. Find the kinetic energy of the electron in terms of λ. Show graphically the variation of kinetic energy of the electron as a function of λ.

OR

(a) Find the expression for electric potential at a point on the perpendicular bisector of an electric dipole.

(b) The potential V due to a charge distribution at a point (x,y) is given by $V = -4x^2 + 3y$. Calculate the magnitude of the electric field due to this charge configuration at the point (1,1).

(c) The graphical variation of electric potential(V) with $\frac{1}{r}$, where r is the distance from the source charge, for two different point charges q_1 and q_2 are shown in the figure.
(i) What are the nature of the charges q_1 and q_2 ?
(ii) Which of the two is of larger magnitude and why?

32   (a) A circular coil of radius 'a' having N no. of turns is placed in Y-Z plane such that its   5
centre is at the origin. It is carrying a current I in anticlockwise direction. Find the expression of magnetic field at a point (x,0,0) due to that coil.
(b) A wire of length l is in the form of a circular loop P of one turn. This loop is reshaped into loop Q of three turns. Find the ratio of the magnetic fields at the centres of loop P and loop Q for the same current through them.

OR

(a) Two infinitely long straight wires XY and MN carrying currents are placed parallel to each other separated by a distance r, as shown in the figure.
Find the expression of the force per unit length acting between them. Also show the direction of the force in the diagram. Is the force attractive or repulsive?
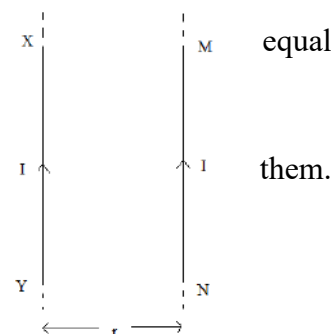
(b) A wire AB carrying a steady current of 12 A is lying on the table. Another wire CD carrying 5A current is held vertically above AB at a height of 1 mm. Find the mass per unit length of the wire CD such that it remains suspended at the position when left free. Also comment on the direction of current in wire CD with respect to wire AB. [g = 10 m/s^2]

33   (a) Derive an expression for the average power of a series LCR circuit connected to a a.c   5
source.
(b) An inductor of 200 mH, capacitor of 400 μf and a resistor of 10Ω are connected in series to ac source of 50 V of variable frequency. Calculate the angular frequency at which maximum power dissipation occurs in the circuit and the corresponding value of the effective current.
(c) A capacitor allows a.c to flow through it easily but blocks d.c. Justify the statement.

. OR

(a) Define the term self-inductance of a solenoid and write its SI unit. Obtain an expression for the self-inductance of a long solenoid.
(b) A 1 m long conducting rod rotates with an angular frequency of 200 rad/s about an axis normal to the rod passing through its one end. The other end of the rod is in contact with a circular metallic ring. A constant magnetic field 0.25 T parallel to the axis exists everywhere. Find the induced emf between the centre and the ring.

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DAV INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION – 2024 – 2025

CLASS : XII   **MAXIMUM MARKS : 80**

SUBJECT : POLITICAL SCIENCE (028)   **TIME : 3 HOURS**

GENERAL INSTRUCTIONS:
1. *The question paper consists of five sections (A, B, C, D and E) with 30 questions in all.*
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. Answers to these questions should not exceed 50- 60 words each.*
5. *Question numbers 19-23 are of 4 marks each. Answers to these questions should not exceed 50- 60 words each.*
6. *Question numbers 24-26 are passage, cartoon and map-based questions. Answer accordingly.*
7. *Question numbers 27-30 are of 6 marks each. Answers to these questions should not exceed 170- 180 words each.*
8. *There is internal choice in 6 marks questions.*

SECTION – A

1. **Consider the following sequence of events during the end of the Cold War**:   1
    1. Economic stagnation in the Soviet Union
    2. Introduction of Perestroika and Glasnost
    3. Fall of the Berlin Wall
    4. Dissolution of the Soviet Union

   Which of the following statement best describes the relationship between these events?
   A) The introduction of Perestroika and Glasnost directly led to economic stagnation.
   B) The fall of the Berlin Wall was a direct result of economic stagnation.
   C) Economic stagnation and political reforms contributed to the dissolution of the Soviet Union.
   D) The dissolution of the Soviet Union led to the fall of the Berlin Wall.

2. **There are two statements given below marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.**   1
   Assertion (A): In Georgia the demand for independence has come from two provinces, resulting in a civil war.
   Reason (R): In Central Asia, Tajikistan witnessed a Civil War that went on for two years till 2002.
    (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

3. **Arrange the following events in the chronological sequence:**   1
   I. The Organization for European Economic Cooperation was established
   II. Euro, the new currency was introduced in the twelve EU members
   III. Bulgaria and Romania join the EU
   IV. The Treaty was Maastricht was signed establishing the European Union
       CODE:
       (A) II, I, IV, III   (C) III, IV, I, II
       (B) I, IV, II, III   (D) I, II, IV, III

4. **Which one of the following statements about the ethnic conflict in Sri Lanka is FALSE?**   1
    (A) Politics in Sri Lanka openly favoured the Sinhala community and the interests of the Tamils were neglected.
    (B) In 1987, the government of India for the first time got directly involved in the Sri Lankan Tamil question.
    (C) Liberation Tigers of Tamil Eelam were supported by the SAARC countries.
    (D) There was no political equality in Sri Lanka, although it had registered considerable economic growth and recorded high levels of economic development.

5. **State True or False:**   1
    I. During the nineties, the Maoists in Nepal took control over its government.
    II. There was a triangular conflict among the monarchist forces, the revolutionaries and the Maoists in Nepal.
    III. In April 2006 the king abolished the Parliament and dismissed the government ending the limited democracy that existed in Nepal.
    IV. The Seven Party Alliance led the largely non-violent pro-democracy movement in Nepal.

    CODE:
    (A) I- True   II- True   III- False   IV- False
    (B) I- True   II- True   III- True   IV- False
    (C) I-False   II- True   III- True   IV- False
    (D) I- True   II- False   III- False   IV- True

6. **Amnesty International is an organization associated with which of the following fields?**   1
    A. Protection of cruelty to animals
    B. Environmental protection
    C. Protection of human rights
    D. Protection of historical monuments

7. **What were the two goals that almost everyone in the national movement agreed upon after independence?**   1
    (A) To establish a monarchy and run the government for the good of all.
    (B) To establish an authoritarian government and run the government for the good of all, particularly the poor and socially disadvantaged groups.
    (C) To run the government through democratic means and the government will be run for the good of all, particularly the poor and socially disadvantaged groups.
    (D) To run the government through military rule, which will be run for the good of the rich and the powerful.

8. **A movement of the people of Hyderabad State against the Nizam's rule gathered force. In respect to the above statement mark the INCORRECT statement.**   1
    I. The peasantry in the Telangana region was the victim of Nizam's oppressive rule and rose against him.
    II. The communists and the Hyderabad Congress were in the forefront of the movement.
    III. The Razakars murdered, maimed, raped and looted, targeting particularly the Muslims.
    IV. The State government had to order the army to tackle the situation.

    CODE:
    (A) Only I   (C) Only III and IV
    (B) Only I, II and III   (D) Only II and IV

9. **Which statement best describes the relationship between Congress and opposition parties in the early years of Indian independence?**   1
    A) They collaborated closely in all policy decisions.
    B) They maintained mutual respect despite political competition.
    C) They engaged in violent conflicts.
    D) They formed a united front against foreign influence.

10. **According to K.N. Raj, why should India 'hasten slowly' for the first two decades?**   1
    (A) To increase foreign aid and investment
    (B) To address the issue of unemployment
    (C) To focus on rapid industrialization
    (D) To ensure that democracy is not endangered

11. **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 Second Five Year Plan stressed on heavy industries. It was drafted by a team of economists and planners under the leadership of P. C. Mahalanobis.
Reason (R) : However the Second Five Year Plan was responsible for the ruin of the agricultural sector as it did not have enough funds to support it.
    (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

12. **Which political parties wanted to follow a pro-US foreign policy?**   1
    A) Indian National Congress and Communist Party of India
    B) Janata Dal and Nationalist Congress Party
    C) Samajwadi Party and Bahujan Samaj Party
    D) Bharatiya Jan Sangh and Swatantra Party

SECTION – B

13. State any two main objectives of the ASEAN regional forum.   2
14. Like India, why could democracy not take roots in Pakistan even though both countries share a common past?   2
15. State any four criteria that have been proposed in the recent years for new permanent and non-permanent members of the UN Security Council.   2
16. Why did the critics think that elections in India will not be a success? Mention any two reasons.   2
17. Highlight the two areas on which the First Five Year Plan focused.   2
18. What was the purpose of the Bandung Conference?   2

SECTION – C

19. Describe any four consequences of "Shock Therapy".   4

OR

"The collapse of the second world of the Soviet Union and the socialist systems in eastern Europe had profound consequences for world politics". In this context examine any four consequences of the disintegration of the Soviet Union.

20. Describe any four new economic policies of China to make it grow at a faster rate.   4
21. As decided by the member states in 2005, highlight any four steps to make the United Nations more relevant in the changing context.   4
22. "For a long time, Congress Party had been a social and ideological coalition". Justify the statement.   4
23. Explain any four important features of India's Nuclear Policy.   4

OR

Assess any four principles of India's foreign policy.

SECTION – D

24. **Read the passage given below and answer the questions that follow:**   4
On 14-15 August 1947, not one but two nation-states came into existence – India and Pakistan. This was a result of 'partition', the division of British India into India and Pakistan. The drawing of the border demarcating the territory of each country marked the culmination of political developments that you have read about in the history textbooks. According to the 'two-nation theory' advanced by the Muslim League, India consisted of not one but two 'people', Hindus and Muslims. That is why it demanded Pakistan, a separate country for the Muslims. The Congress opposed this theory and the demand for

Pakistan. But several political developments in 1940s, the political competition between the Congress and the Muslim League and the British role led to the decision for the creation of Pakistan.

I. **Which of the following statements best describes the concept of "Nation Building"**
   a. It refers to the process of establishing a democratic government in a country.
   b. It signifies the creation of a strong military and defense system.
   c. It involves the development of a sense of common identity and purpose among the citizens of a country.
   d. It denotes the formation of a federal system of governance.

II. **The interim government formed under the cabinet plan was headed by—**
   a. Dr. Rajendra Prasad
   b. Jawaharlal Nehru
   c. Sardar Vallabhbhai Patel
   d. C. Rajagopalachari

III. **The cities that were divided into "Communal Zones" during the partition violence were—**
   a. Kashmir, Calcutta, Lahore
   b. Madras, Amritsar, Lahore
   c. Lahore, Calcutta, Delhi,
   d. Lahore, Amritsar, Calcutta

IV. **Which among the following statements about the partition is incorrect?**
   a. The Partition of India was the outcome of the "Two Nation Theory"
   b. Punjab and Bengal were the two provinces divided on the basis of religion
   c. East Pakistan and West Pakistan were not contiguous
   d. The scheme of partition included a plan for the transfer of population across the border

25. **In the given outline political map of India, four states have been marked as (A), (B), (C) and (D). Identify these states on the basis of the information given below and write their correct names in your answer book along with the respective serial numbers of the information used and the concerned alphabets as per the format that follows:**   4

   (i) The state where the Congress party failed to win a majority in the First General Election of India.
   (ii) The state which faced the most acute food shortage in 1965-66
   (iii) The state carved out of Assam in 1972.
   (iv) The original state from which Chhattisgarh was carved out.

Sr. Number for the information used	Alphabet Concerned	Name of the states
i		
ii		
iii		
iv		
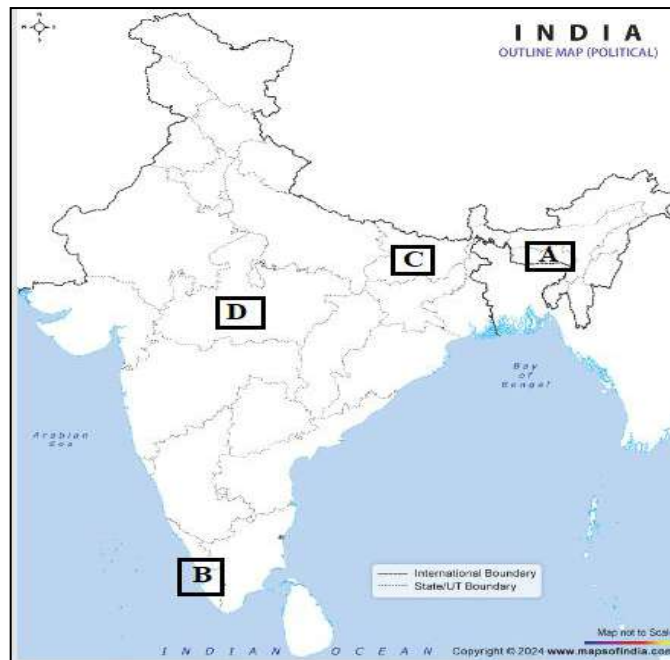
26. **Study the given cartoon and answer the questions that follow:** 1+2+1
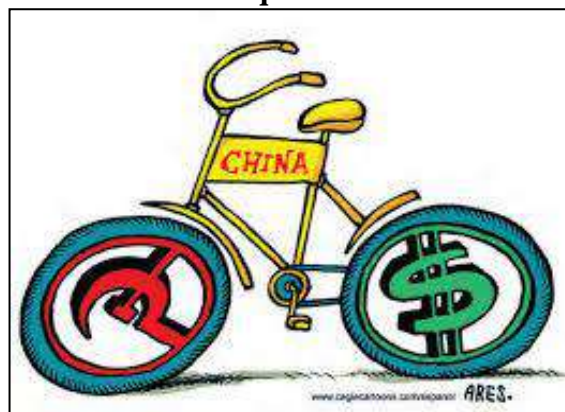
A. Why has the bicycle been chosen to represent China?
B. What do the symbols within the two wheels stand for? Which two economic ideologies do the symbols represent?
C. What message does the cartoon convey?

SECTION – E

27. Examine any six factors responsible for the disintegration of the former Soviet Union. 6

OR

Highlight and three positive and three negative features each of the Soviet system in the Soviet Union.

28. Assess the positive and negative aspects of India's relations with Bangladesh. 6

OR

"Military rule and democracy are the two sides of a coin in Pakistan". Examine the statement.

29. Analyze any six consequences of the partition of India in 1947. 6

OR

How did the state of Hyderabad become a part of the Indian Union after partition?

30. Explain any four reasons for the popular struggle in East Pakistan against West Pakistan during 1971. Describe any two consequences of this conflict. 6

OR

Analyze the conflicting Sino-Indian relations since 1950 onwards.

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D.A.V. INSTITUTIONS, WESTBENGAL ZONE
HALFYEARLY EXAMINATION
SESSION: 2024 – 2025

Class: XII   **Maximum Marks: 70**
Subject: Psychology   **Time: 3 Hours**

General Instructions:
❖ All questions are compulsory. Answers should be brief and to the point.
❖ **SECTION – A** has **15** Learning Checks carrying one mark each. Answer them as directed.
❖ Questions **16 to 21** in **SECTION – B** are Very Short Answer type questions carrying 2 marks each. Answer to each question should not exceed **40 words**.
❖ Questions **22 to 24** in **SECTION–C** are Short Answer Type I questions carrying 3 marks each. Answer to each question should not exceed **80 words**.
❖ Questions **25 to 28** in **SECTION– D** are Short Answer Type II questions carrying 4 marks each. Answer to each question should not exceed **120 words**.
❖ Questions **29 and 30** in **SECTION–E** are Long Answer Type questions carrying 6 marks each. Answer to each question should not exceed **200 words**.
❖ Questions **31 to 34** in **SECTION – F** are case study-based questions. There are two 2-marks and two 1-mark questions.

SECTION-A

1. Ajay appeared for NEET examination but not qualified this time. Instead of being disappointed he motivates himself to work heard for next time. Identify the type of intelligence being demonstrated by Ajay.   1
   a) Verbal   b) Naturalistic   c) Spatial   d) Emotional

2. While discussing mountain range in the geography class, Sujata became aware of a trip to the mountain some years ago. According to Freud this level of awareness is lying in the –   1
   a) Conscious   b) Preconscious   c) Unconscious   d) Instinct

3. Kavita was suffering from psychological disorders. When she was given the news of her father's death, she did not show any emotional reaction. Her emotion was just same as before. From this condition of Kavita, identify her psychological disorders –   1
   a) Schizophrenia   b) Depression   c) Dissociative Amnesia   d) Panic Attack

4. _____ results from the blocking of needs and motives by something or someone that hinders us from achieving a desired goal.   1
   a) conflicts   b) frustration   c) internal pressure   d) social pressure

5. Rahul is high on the ability to think analytically and critically. Therefore, he performs well in academics. He is most likely to possess the following –   1
   i. High contextual intelligence
   ii. High componential intelligence
   iii. High experiential intelligence
   iv. High meta or a higher order component
   v. High performance component
   a) i, ii & iii   b) iii, iv & v   c) i, iii & v   d) ii, iv & v

6. Who was devised the concept of Intelligence Quotient (IQ)?   1
   a) Alfred Binet   b) Theodore Simon   c) William Stern   d) David Wechsler

7. "Nature always follows my instructions. I can control the weather according to my mood." –   1
   This is a statement made by a person suffering from the delusion of _____.
   a) persecution   b) grandeur   c) control   d) reference

8. Which of the following statement is not appropriate –   1
    I. Anxiety disorders have been linked to low activity of the neurotransmitter gamma aminobutyric acid (GABA).
    II. Schizophrenia has been linked to low activity of dopamine.
    III. Depression has been linked to excess activity of serotonin.
    a) I & II   b) II & III   c) I & III   d) I, II & III

9. Match the following –   1

I. Alarm Reaction Stage	A. The parasympathetic nervous system calls to protect body resources
II. Resistance Stage	B. State of physical, emotional and psychological exhaustion.
III. Exhaustion Stage	C. Individual is ready for fight or flight response.
IV. Burnout	D. It is the result of prolonged or chronic stress.

    a) I – A, II – B, III – C, IV – D   b) I – C, II – A, III – D, IV – B
    c) I – D, II – C, III – B, IV – A   d) I – A, II – D, III – B, IV – C

10. The most direct danger of _____ overdose, which slows down the respiratory centres in the brain, almost paralysing breathing, and in many cases causing death.   1
    a) heroin   b) alcohol   c) nicotine   d) cocaine

11. _____ seeks to satisfy an individual's instinctual needs in accordance with reality.   1
    a) Id   b) Ego   c) Superego   d) Libido

Two statements are given in the question below as Assertion (A) and Reason (R). Read the statements and choose the appropriate option.

12. **Assertion (A):** Cognitive Assessment System can be used to assess cognitive deficits in children with learning problem.   1
    Reason (R): It consists of verbal and non-verbal tasks that measures basic cognitive functioning.
    Options:
    a) Both A and R are true, and R is the correct explanation of A
    b) Both A and R are true, but R is not the correct explanation of A
    c) A is true, R is false
    d) A is false, R is true

13. **Assertion (A):** Psychoneuroimmunology focuses on the link between the mind, brain and the immune system.   1
    Reason (R): Psychological stress is accompanied by negative emotions and associated behaviour.
    a) Both A and R is true and R is the correct explanation of A.
    b) Both A and R is 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.

14. **Assertion (A):** Primary appraisal of stress refers to the assessment of one's coping abilities and resources, whether they will be sufficient to meet the challenge.   1
    Reason (R): The resources may be mental, physical or social.
    a) Both A and R is true and R is the correct explanation of A.
    b) Both A and R is 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.

15. **Assertion (A):** The seventeenth and eighteenth centuries were known as the Age of Reason and Enlightenment.   1
    Reason (R): This is the time when scientific methods replaced the faith and dogma.

a) Both A and R is true, and R is the correct explanation of A.

b) Both A and R is true, but R is not the correct explanation of A.

c) A is true, but R is false.

d) A is false, but R is true.

SECTION-B

16. What is self-actualisation?   2

    OR

    Differentiate personal self from social self.

17. Sruti's paternal grandmother started changing and washing her clothes multiple times in a   2
    day because she is thinking that her clothes are contaminated by dust. Name the
    psychological disorder and identify these symptoms.

18. Mention different types of aggression shown by the children suffering from conduct   2
    disorders.

19. Explain the relationship between creativity and intelligence.   2

    OR

    State the important features of creativity tests.

20. Write the name of those classification systems for psychological disorders. Explain the   2
    purpose of developing such classification system.

21. State the name of four competencies of intelligence in the Indian tradition.   2

SECTION-C

22. One of your batchmate lost his/her grandparent just a month before of your examination. As   3
    a good friend, you want to help him/her. Describe three different types of social support that
    you can provide to your friend.

    OR

    Describe any two methods of stress management

23. How is Erikson's theory differing from Freud's theory for personality development.   3

24. Describe the symptoms of illness anxiety disorder and conversion disorder.   3

    OR

    Differentiate between Bipolar I and Bipolar II disorders.

SECTION-D

25. What do you mean by stress resistant personality? Mention any two ways to maintain   4
    wellbeing of an individual.

    OR

    Mention any two sources of stress and explain two types of coping mentioned by Lazarus
    and Folkman.

26. Somita is a renown clinical psychologist who published many articles in printing media and   4
    also, she is a very good dancer. Identify and explain four types of intelligences mentioned in
    Gardner's theory which are most suitable for her.

27. Sumit is a 35 years old male, who is recently diagnosed as schizophrenic by a psychiatrist.   4
    Now it's your responsibility to find out the presence of any positive symptoms. Describe any
    two types of positive symptoms in detail.

    OR

    Explain any two negative symptom and two psychomotor symptoms of schizophrenia.

28. Briefly explain the behavioural approach and humanistic approach to study personality.   4

SECTION-E

29. Rohit and Anisha are exceptionally intelligent children of highly successful parents. While   6
    Rohit is their biological child and Anisha is an adopted one. How can you explain the

similarities in their intelligence with their parents? What type of test would you suggest to assess their intelligence?

<center>OR</center>

As a student of class XII, you wish to score good in your Board examination. You start the planning for the same by attending classes regularly, taking notes, setting study targets, etc. Identify and explain the theory of intelligence which includes planning as an essential feature.

30. How does behavioural analysis help us in assessing personality? Explain any two methods of behavioural analysis with their limitations.　　6

<center>OR</center>

What is ego defence mechanism? Explain five types of defence mechanisms with proper examples.

<center>**SECTION-F**</center>

Read the case and answer the following questions:

Stress can cause illness by impairing the workings of the immune system. The immune system guards the body against attackers, both from within and outside.

The white blood cells (leucocytes) within the immune system identify and destroy foreign bodies (antigens) such as viruses. It also leads to the production of antibodies. There are several kinds of white blood cells or leucocytes within the immune system, including T cells, B cells and natural killer cells. T cells destroy invaders, and T-helper cells increase immunological activity.

31. Which cells are attacked by Human Immuno Deficiency Virus?　　1
32. What do we mean by Psychoneuroimmunology?　　2

Read the case and answer the following questions:

The growth of a scientific attitude towards psychological disorders in the eighteenth century contributed to the Reform Movement and to increased compassion for people who suffered from these disorders. Reforms of asylums were initiated in both Europe and America. One aspect of the reform movement was the new inclination for deinstitutionalisation.

33. What is deinstitutionalisation?　　1
34. Explain bio-psycho-social approach of psychological disorders.　　2

<center>**************************</center>

DAV INSTITUTIONS, WEST BENGAL ZONE
HALF YEARLY EXAMINATION
SESSION-2024-25

CLASS: XII   **MAXIMUM MARKS:80**
**SUBJECT: SOCIOLOGY**   **TIME:3 HOURS**

General Instructions

1. The question paper is divided into four sections.
2. There are 35 questions in all. All questions are compulsory.
3. Section A includes question No. 1-16. These are MCQ type questions. As per the question, there can be one answer.
4. Section B includes question No.17-25. These are very short answer type questions carrying 2 marks each. Answer to each question should not exceed 30 words.
5. Section C includes question No. 26-32. They are short answer type questions carrying 4 marks each. Answer to each question should not exceed 80 words.
6. Section D includes question No. 33-35. They are long answer type questions carrying 6 marks each. Answer to each question should not exceed 200 words each.

1 Which of the following does not lead to population explosion?   1
(A) Low level of economic development can lead to population explosion.
(B) It happens due to high birth rate and low death rate.
(C) It takes longer for society to alter reproductive behaviour.
(D) Reduced fertility rate

2 Two statements are given, one is labelled as Assertion (A) and the other as Reason (R) :   1
Assertion (A) : Tribes should really be seen as "secondary" phenomena arising out of the exploitative and colonialist contact between pre existing states and non-state groups like the tribals.
Reason (R) : This contact itself creates an ideology of "Pristine".
Select the correct answer from the codes given below:
Codes :
(A) Both (A) and (R) are true and (R) is the correct explanation for (A).
(B) Both (A) and (R) are true, but (R) is not the correct explanation for (A).
(C) (A) is true, but (R) is false.
(D) (A) is false, but (R) is true

3 Two statements are given, one is labelled as Assertion (A) and the other as Reason (R).   1
Assertion (A) : The problem of selective abortion is not due to poverty or ignorance or lack of resources.
.Reason (R) : We find the sex ratio to be the lowest in the most prosperous regions
.Select the correct answer from the codes given below:
 Codes :
(A) Both (A) and (R) are true and (R) is the correct explanation for (A).
(B) Both (A) and (R) are true, but (R) is not the correct explanation for (A).
(C) (A) is true, but (R) is false.
(D) (A) is false, but (R) is true
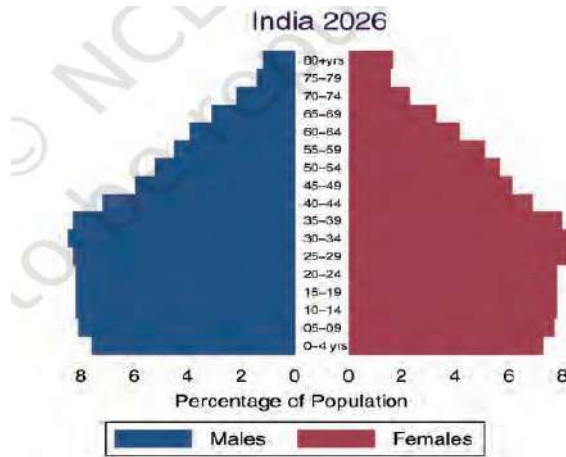
4   **India 2026**   1

This pyramid does not indicate which of the following?
(A) Demographic dividend   (B) Low dependency ratio
(C) Relatively low death rate   (D) High birth rate
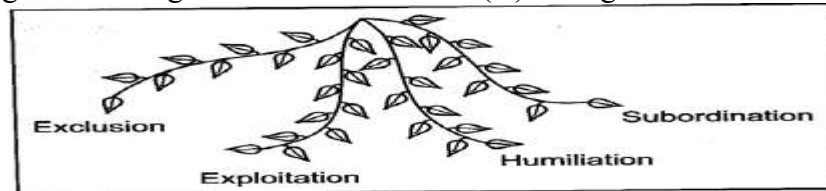
5   In the long run, the solution to the problem of sex-selective abortion lies in   1
(A) Stricter laws only   (B) Severe punishment
(C) Abstaining from having children   (D) Change in social attitudes

6   1

The above picture indicates
(A) Dimensions of untouchability   (B) Alternatives of untouchability
(C) Types of untouchability   (D)Categories of untouchability

7   Match List - I with List - II :   1
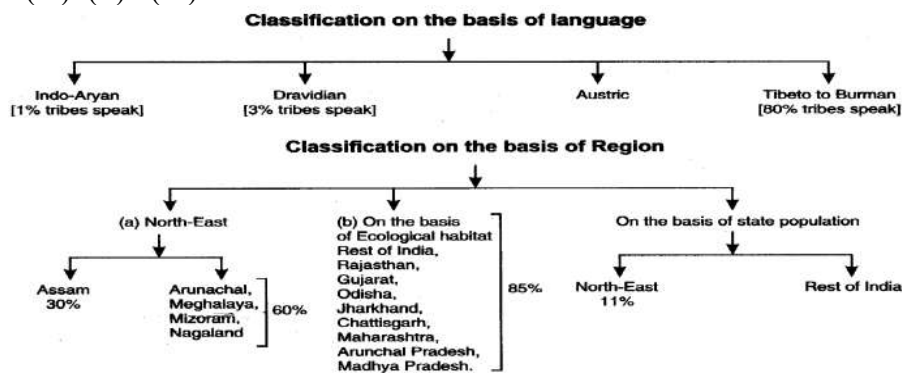List - I   List - II
(a) Manipur   (i) Tribal Population halved
(b) Tripura   (ii) Disturbed Area
(c) Meghalaya   (iii) Garha Mandla
(d) Central India   (iv) Khasi Tribe
Select the correct answer from the code given below:
      (a) (b)   (c)   (d)
(A) (ii) (i) (iv) (iii)
(B) (iii) (ii) (i)   (iv)
(C) (iv) (i) (iii) (ii)
(D)   (i) (iv) (ii) (iii)

8   **Classification on the basis of language**   1

The above classification of tribes is based on
(A)Permanent traits   (B)Acquired traits   (C)Mixed traits   (D)Basic traits

9   "Development at the expense of tribes adversely affected tribal population in many ways".   1
Which of the following effect can be said incorrect about it?
(A)loss of the forests   (B)displacement
(C)In-migration of non tribals   (D)superstitious belief

10	"The girls should be educated but within the precincts of their homes"- Who reflected such a view? (A) Sir Syed Ahmed Khan (B) Ishwar Chandra Vidyasagar (C) Both A and B (D)Jotiba Phule	1
11	The service and artisanal castes who occupied the lower rungs of the caste hierarchy are referred to as - (A) Dalit (B) Scheduled Tribes (C) Bohras (D) OBCs	1
12	Two statements are given, one is labelled as Assertion (A) and the other as Reason (R) : Assertion (A) : Social exclusion is involuntary. .Reason (R) :Historically, the caste system classified people by their occupation and status. Select the correct answer from the codes given below: Codes : (A) Both (A) and (R) are true and (R) is the correct explanation for (A). (B) Both (A) and (R) are true, but (R) is not the correct explanation for (A). (C) (A) is true, but (R) is false. (D) (A) is false, but (R) is true	1
13	Which types of policies are aimed at persuading, encouraging or forcing all citizens to adopt a uniform set of cultural values and norms? (A)Secularist (B) Federal (C) Assimilationist (D) Integrationist	1
14	Two statements are given, one is labelled as Assertion (A) and the other as Reason (R) : Assertion (A) : The main criteria for inclusion in civil society are that the organisation should not be state-controlled but it should be a purely commercial profit-making entity. Reason (R) : Doordarshan is not part of civil society. Select the correct answer from the codes given below: Codes : (A) Both (A) and (R) are true and (R) is the correct explanation for (A). (B) Both (A) and (R) are true, but (R) is not the correct explanation for (A). (C) (A) is true, but (R) is false. (D) (A) is false, but (R) is true.	1
15	The demand for ------------ began with an agitation in rural Rajasthan. (A) Right to property (B) Right to education (C) Right to expression (D) Right to Information	1
16	Appeasement of minorities by giving special consideration is considered by the majority community as--- (A) Injustice (B) Favouritism (C) Partiality (D) Competition	1
17	How does literacy rate vary across gender and region? Or National family planning programme was renamed as National Family Welfare Program". Give reason for this.	2
18	Name the law which punishes prenatal sex determination. Suggest any other way that may prove useful to achieve the objective for changing attitudes of the society towards prenatal sex determination.	2
19	How urban life offers partial protection to scheduled caste and scheduled tribes?	2
20	What changes did colonialism bring about in the caste system?	2
21	Mention the isolation and integration debate on tribes.	2
22	What is the co-relation between caste and economic status?	2
23	Write the role of non-state initiatives to the issue of caste and tribe discrimination.	2
24	Who wrote Stree Purush Tulna? What does it explain?. Or Distinguish between scheduled castes and scheduled tribes.	2
25	How can commitment to the protection of minorities can also be a challenge to the state?	2

26	What is meant by the age structure of the population? Why is it relevant for economic development and growth?	4

27   Highlight the sources of conflict between national development and tribal development.   4

28   "Caste system is the combination of two kinds of principles." Analyze the statement by giving suitable examples.   4

29   How did the dominant caste emerge? Write few features of dominant caste.   4

30   Discuss the growth of the Women's Movement in India since 1970s.   4

31   Explain Regionalism in the India context by mentioning the strategies taken by the government for regional accommodation.   4

<div align="center">Or</div>

Why is it easy to describe a nation but hard to define it?

32   Differentiate between the Western and Indian meaning of Secularism by giving suitable examples.   4

33   6

Year	Sex ratio (all age groups)	Variation over previous decade	Child Sex ratio (0–6 years)	Variation over previous decade
1901	972	–	–	–
1911	964	–8	–	–
1921	955	–9	–	–
1931	950	–5	–	–
1941	945	–5	–	–
1951	946	+1	–	–
1961	941	–5	976	–
1971	930	–11	964	–12
1981	934	+4	962	–2
1991	927	–7	945	–17
2001	933	+6	927	–18
2011	943	+10	919	–8

NOTE: The sex ratio is defined as the number of females per 1000 males; Data on age-specific sex ratios is not available before 1961
Source: Census of India 2011, Government of India.

On the basis of given data state what has really alarmed demographers, policy makers, social activists and concerned citizens? Explain several reasons for the decline in the sex ratio in India as mentioned by them.

34   "If hard labour were such a good thing the rich would keep it all for themselves. All over the world, back-breaking work like stone breaking, digging, carrying heavy weights, pulling rickshaws or carts is invariably done by the poor. And yet they rarely improve their life chances."   2+4=6

Based upon above passage answer the following questions.
(a) What is social stratification?
(b) Give any two characteristics of this phenomena.

35   What is a Civil society? What is its role and significance today? Support your answer with suitable examples.   6