

**II Pre-Board Examination, 2025-26**

Sub. : Mathematics (041)

Time : 3.00 Hrs. ]

Class – XII

[ M. M. : 80

**General Instructions:**

*Read the following instructions very carefully and strictly follow them:*

- (i) *This Question paper contains 38 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 18 are multiple choice questions (MCQs) and Questions no. 19 and 20 are Assertion-Reason based questions of 1 mark each.*
- (iv) *In Section B, Questions no. 21 to 25 are Very Short Answer (VSA)-type questions, carrying 2 marks each.*
- (v) *In Section C, Questions no. 26 to 31 are Short Answer (SA)-type questions, carrying 3 marks each.*
- (vi) *In Section D, Questions no. 32 to 35 are Long Answer (LA)-type questions, carrying 5 marks each.*
- (vii) *In Section E, Questions no. 36 to 38 are Case study-based questions, carrying 4 marks each.*
- (viii) *There is no overall choice. However, an internal choice has been provided in 2 questions in Section B, 4 questions in Section C, 2 questions in Section D and one subpart each in 2 questions of Section E.*
- (ix) *Use of calculators is not allowed.*

**SECTION-A**

*(This section comprises of multiple-choice questions (MCQs) of 1 mark each)*

*Select the correct option.*

1. Function  $f = \{(1,5), (2,5), (3,5)\}$  has set  $A = \{1,2,3\}$  to set  $B = \{1,2,3,4\}$  is

- A. one-one and into
- B. many-one and into
- C. one-one and onto
- D. many-one and onto

2. The graph of  $f(x) = x + 1$  is the line

- A.  $-1 < x < 1$
- B.  $-\frac{1}{2} < x < \frac{1}{2}$
- C.  $-1 < x < 1$
- D.  $-1 \leq x \leq 1$

3. If  $A$  is a square matrix of order 3 and  $|A| = 1$ , the value of  $|A^2(A^3)|$  is

- A. 8
- B. 64
- C. 2
- D. 1

4. If  $A$  and  $B$  are invertible matrices then which of the following is not correct?

- A.  $(A+B)^{-1} = B^{-1} + A^{-1}$
- B.  $(AB)^{-1} = B^{-1}A^{-1}$
- C.  $\text{adj}(A) = |A|A^{-1}$
- D.  $|A^T| = |A|^{-1}$

5. Let  $A = \begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}$  be a square matrix such that  $\text{adj } A = A^{-1}$ . Then,  $(a - 2 + c + d)$  is equal to

- A. 2
- B. 29
- C. 2c
- D. 0

6. Which of the following statements is true for the function

$$g(x) = \begin{cases} x^2 + 2x + 3 & x < 0 \\ x^2 - 2x + 3 & x > 0 \end{cases}$$

A.  $f(x)$  is continuous and differentiable for every  $x \in \mathbb{R}$

B.  $f(x)$  is continuous  $\forall x \in \mathbb{R}$

C.  $f(x)$  is continuous and differentiable  $\forall x \in \mathbb{R} - \{0\}$

D.  $f(x)$  is discontinuous at infinitely many points.

7. The derivative of  $7^x$  is  $7^x \ln 7$

- A.  $\left(\frac{7^x}{\ln 7}\right)^2$
- B.  $\left(\frac{7^x}{\ln 7}\right)^2$
- C.  $\left(\frac{7^x}{\ln 7}\right)^2$
- D.  $\left(\frac{7^x}{\ln 7}\right)^2$

8. The interval in which  $f(x) = e^{2x} - x$ ,  $x \in \mathbb{R}$  is strictly increasing function is

- A.  $(-2, 0)$
- B.  $(2, \infty)$
- C.  $(0, 2)$
- D.  $\mathbb{R}$

9. Critical point  $x$  is a point in the domain of a function  $f$  in which

- A.  $f'(x) = 0$
- B.  $f$  is not differentiable at  $x$ .
- C. Both (A) and (B)
- D. None of (A) or (B)

10. The value of  $\int_0^{\frac{1}{2}} \sin^2 x dx$  is

- A.  $\frac{1}{4}$
- B.  $\frac{1}{2}$
- C. 0
- D.  $2\pi$

11. The double integral of a vector field in the line  $\frac{x}{a} - \frac{y}{b} + \frac{z}{c} = \frac{1}{2}$

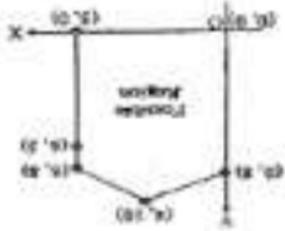
- A.  $2, -1, 0$
- B.  $2, 1, 0$
- C.  $2, 1, 1$
- D.  $2, -1, 1$

12.  $y = e^{2x}$  is a solution of the differential equation

- A.  $y'' + y' + 2y = 0$
- B.  $y'' - y' + 2y = 0$
- C.  $y'' - y' - 2y = 0$
- D.  $y'' + y' - 2y = 0$

- A. (5, 8)  
C. (7, 0)

- B. (4, 10)  
D. (0, 0)



The  $Z = 3x - 4y$  for the objective function. Minimum of  $Z$  occurs

16. The feasible region for a L.P.P. is shown in the figure

A.  $2 \leq x \leq 4$  and  $0 \leq y \leq 2$   
B.  $2 \leq x \leq 4$  and  $0 \leq y \leq 4$   
C.  $2 \leq x \leq 4$  and  $0 \leq y \leq 2$   
D. Projection of  $\frac{a}{b}$  on  $\frac{a}{b}$  is  $\frac{a}{b}$

A.  $2 \leq x \leq 4$  and  $0 \leq y \leq 2$   
B.  $2 \leq x \leq 4$  and  $0 \leq y \leq 4$   
C.  $2 \leq x \leq 4$  and  $0 \leq y \leq 2$   
D. Projection of  $\frac{a}{b}$  on  $\frac{a}{b}$  is  $\frac{a}{b}$

17. For any two vectors  $\vec{a}$  and  $\vec{b}$  which of the following is not correct

- A.  $\frac{|\vec{a}|}{|\vec{b}|}$   
B.  $\frac{|\vec{a}|}{|\vec{b}|}$   
C.  $\frac{|\vec{a}|}{|\vec{b}|}$   
D.  $\frac{|\vec{a}|}{|\vec{b}|}$

18. If  $\vec{a} = x\hat{i} + y\hat{j} + z\hat{k}$  and  $\vec{b} = x\hat{i} + y\hat{j} + z\hat{k}$ , then  $|\vec{a} \cdot \vec{b}| =$

- A.  $x^2 + y^2 + z^2$   
B.  $(x^2 + y^2 + z^2)^2$   
C.  $(x^2 + y^2 + z^2)^2$   
D.  $x^2 + y^2 + z^2$

19. Which of the following is a homogeneous differential equation?

Reason (R) : The function  $f(x) = |x|$  is not differentiable at  $x = 0$ .

differentiable at  $x = 1, 2$

19. Assertion (A) : The function  $f(x) = |x - 1| + |x - 2|$  is neither continuous nor

(B) (A) is false but (R) is true.

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

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

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

(F) as given below.

20. Question numbers 19 and 20 are Assertion-Reason based questions carrying 1 mark each. Two statements are given, one labeled Assertion (A) and the other labeled Reason (R). Select the correct answer from the options (A), (B), (C) and (D) as given below.

ASSERTION-REASON BASED QUESTIONS

A.  $\frac{1}{4}$

B.  $\frac{1}{2}$

C.  $\frac{3}{4}$

D.  $\frac{5}{4}$

P(A/B) =

18. For any two events A and B,  $P(A) = \frac{1}{2}$ ,  $P(B) = \frac{1}{3}$ ,  $P(A \cap B) = \frac{1}{4}$ . The value of

A. 3

B. 4

C. 7

D. 8

17. The maximum value of  $Z = 3x + 4y$  subject to the constraints  $x + 2y \leq 12$ ,  $x \geq 0$

21. Answer (A) The tangent  $y = k \sin x + b \cos x$  where  $k, b = 2$  is the solution of

$$\text{differential equation } \frac{dy}{dx} + y = 0$$

Reason (C) The order of a differential equation is equal to number of derivatives in the general solution of the differential equation.

## SECTION-B

(This section comprises of 2 very short answer (VSA) type questions of 2 marks each.)

21. Find the value of  $\sec^{-1} \left( \cos \left( \frac{4\pi}{3} \right) \right)$

$$22. \text{ Find the matrix } A \text{ so that } A \begin{bmatrix} 4 & 3 & 6 \\ 1 & 2 & 3 \\ -1 & -1 & -4 \end{bmatrix} = \begin{bmatrix} 6 & 3 & 1 \\ 3 & 4 & 6 \\ 0 & 0 & 0 \end{bmatrix}$$

OR

$$23. A = \begin{bmatrix} 1 & 2 & 3 \\ 2 & 1 & 0 \\ 3 & 0 & 1 \end{bmatrix} \text{ and } I = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix} \text{ find } X \text{ so that } A^2 - 2A - X = I$$

24. If  $\tan^{-1} x = \pi \cos (\pi - y)$ , then prove that  $\frac{dy}{dx} = \frac{\cos^2 (y + X)}{\sin y}$

25. The side of an equilateral triangle is increasing at the rate of 2 cm/sec. At what rate is its perimeter and area are increasing when the side of the triangle is 10 cm.

OR

At what point to the curve  $(t, 2t^2)$  does the tangent line be equal to constant value.

Find

24. Find  $\int \frac{1}{\sqrt{1-x^2}} dx$

## SECTION-C

(This section comprises of 4 short answer (SA) type questions of 3 marks each.)

26. If  $\tan^{-1} x = (\cos t)^2$  then  $\frac{dy}{dx}$

OR

If  $x = a \cos t$  and  $y = a \sin t$  - (short) then  $\frac{dy}{dx}$

27. Find the differential equation  $x^2 - 1 \frac{dy}{dx} = 1$

OR

Let me differential equation  $\cos^2 x \frac{dy}{dx} + y = \tan x$  ( $0 \leq x < \frac{\pi}{2}$ )

28. A girl walks 4 km towards west, then she walks 3 km in a direction  $30^\circ$  east of north and stops. Determine the girl's displacement from her starting point of departure.

OR

Find a unit vector perpendicular to each of the vectors  $\left( \frac{1}{\sqrt{2}}\hat{i} + \frac{1}{\sqrt{2}}\hat{j} \right)$  and  $\left( \frac{1}{\sqrt{2}}\hat{j} - \frac{1}{\sqrt{2}}\hat{k} \right)$  where

$$\hat{i}, \hat{j}, \hat{k} \text{ are unit vectors along } x, y, z \text{ axes and } \hat{i}^2 = \hat{j}^2 = \hat{k}^2 = 1$$

29. Find the vector equation of the joining  $(1, 1, 1)$  and  $(-1, 1, 1)$ . Show that it is perpendicular to the  $z$ -axis.

30. Solve the following Linear Programming Problems graphically.

$$\text{Maximize } Z = 5x + 10y$$

subject to the constraints

$$x + 2y \leq 120$$

$$x + y \geq 60$$

$$x - 2y \geq 0$$

$$x \geq 0, y \geq 0$$

31. Assume that each born child is equally likely to be a boy or a girl. If a family has two children, what is the conditional probability that both are girls given that

A) The youngest is a girl?

B) At least one is a girl?

OR

An electronic assembly consists of two subsystems, say, A and B. From previous testing procedures, the following probabilities are assumed to be known:  $P(A \text{ fails}) = 0.2$ ,  $P(B \text{ fails alone}) = 0.15$ ,  $P(A \text{ and } B \text{ fail}) = 0.15$

Evaluate the following probabilities

I)  $P(A \text{ fails} | B \text{ has failed})$

II)  $P(A \text{ fails alone})$

SECTION-D

[5×4=20]

(This section comprises of 4 long answer (LA) type questions of 5 marks each.)

(Question 32 - Question 35):

Mathematics/XII/Set-I/DR-II

32. An amount of Rs 600 crores is spent by the government in three schemes: Scheme A, B and C. Now twice the amount spent on Scheme C together with amount spent on Scheme A is Rs 700 crores. And three times the amount spent on Scheme A together with amount spent on Scheme B and Scheme C is Rs 1200 crores. Find the amount spent on each Scheme using matrices?

33. Using integration, find the area of the region enclosed between the circle  $x^2 + y^2 = 16$  and the lines  $x = -2$  and  $x = 2$ .

34. Evaluate:

$$\int_0^4 (|x| + |x - 2| + |x - 4|) dx$$

OR

Find

$$\int \frac{(3 \sin x - 2) \cos x}{5 - \cos^2 x - 4 \sin x} dx$$

35. Find the co-ordinate of the foot of perpendicular and the length of perpendicular drawn from the point  $P(5, 4, 2)$  to the line  $\vec{r} = (-\hat{i} + 3\hat{j} + \hat{k}) + \lambda(2\hat{i} + 3\hat{j} - \hat{k})$ . Also, find the image of the point in the line.

OR

Find the shortest distance between the lines  $\vec{r} = (\hat{i} + 2\lambda)\hat{i} + (2 + 3\lambda)\hat{j} + (3 + 4\lambda)\hat{k}$

and  $\vec{r} = (2 + 3\mu)\hat{i} + 4(1 + \mu)\hat{j} + 5(1 + \mu)\hat{k}$ .

Mathematics/XII/Set-I/DR-II

(This section comprises of 3 case-study/passage-based questions of 4 marks each with subparts. The first two case study questions have three subparts (i), (ii), (iii) of marks 1, 1, 2 respectively. The third case study question has two subparts of 2 marks.

#### Case Study-1

36. Students of a school are taken to a railway museum to learn about railways heritage and its history. An exhibition in the museum depicted many rail lines on the track near the railway station.



Let  $L$  be the set of all rail lines on the railway track and  $R$  be the relation on set  $L$  defined by  $R = \{(l_1, l_2) : l_1 \text{ is parallel to } l_2\}$

Based on the above information answer the following questions:

- Find whether the relation  $R$  is symmetric or not.
- Find whether the relation  $R$  is transitive or not.
- If one of the rail lines on the railway track is represented by the equation  $y = 3x + 2$ , then find the set of all railway lines in  $R$  related to it

If  $S$  is the relation defined by  $S = \{(l_1, l_2) : l_1 \text{ is perpendicular to } l_2\}$  check whether it is transitive or not.

#### Case Study-2

37. Read the following passage and answer the questions given below.

Amusement Park have different rides. All rides have a fixed path. These paths are geometrical in shapes like straight line, circular, semicircular, and parabolic.



The path of a ride is given by the function  $f(x) = -2x^3 - 9x^2 - kx + 1$

- Find the intervals in which  $f(x)$  is both continuous and differentiable.
- If  $f(x)$  attains maximum value at  $x = -1$  find the value of  $k$ .
- Find the point at which  $f(x)$  attains minimum value. Also find minimum value.

OR

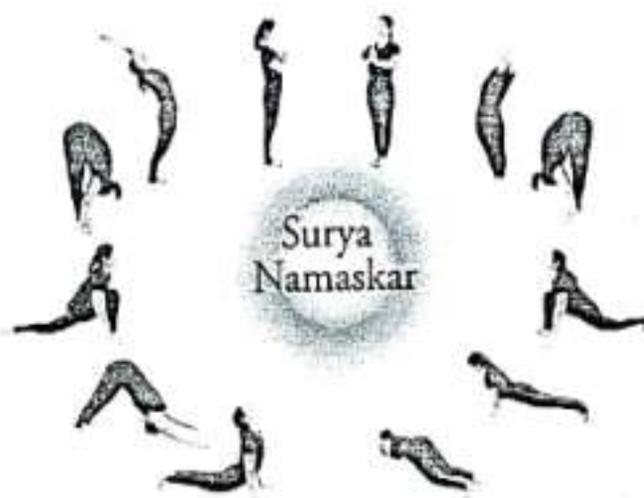
Find the intervals in which  $f(x)$  is strictly increasing and strictly decreasing.

#### Case Study-3

38. Read the following passage and answer the questions given below.

Meditation and Yoga may help to improve cardiovascular health and reduce the chance

of heart attack. There are certain medicines also available which can reduce the chance of heart attack.



Based on the research It is assumed a patient practices meditation and yoga regularly can reduce the risk of heart attack by 30% and taking certain prescribed medicines also reduces the risk of heart attack by 25%. Suppose that at a time, a patient can choose any one of the two options with equal probabilities.

If a person is selected at random from the group of peoples who either follow meditation and yoga or taking prescribed medicines to reduce heart attack.

- I) Find the probability that the person suffers heart attack.
- II) Find the probability that if the patient suffers heart attack. He practiced meditation and yoga?

## II Pre-Board Examination, 2025-26

Sub : Accountancy

Time : 3.00 Hrs. ]

Class – XII

[ M. M. : 80

### General Instructions:

1. This question paper contains 34 questions. All questions are compulsory.
2. This question paper is divided into two parts, Part A and B.
4. Question 1 to 16 and 27 to 30 carries 1 mark each.
5. Questions 17 to 20, 31 and 32 carries 3 marks each.
6. Questions from 21, 22 and 33 carries 4 marks each
7. Questions from 23 to 26 and 34 carries 6 marks each

### PART-A – Accounting for Partnership Firms and Companies

- 1 A and B are partners. A is entitled to a salary of ₹5,000 per month and a commission of 10% on net profit before salary and commission. If the net profit before salary and commission is ₹2,00,000, what is A's total share from salary and commission?
- |            |              |
|------------|--------------|
| a) ₹50,000 | b) ₹70,000   |
| c) ₹80,000 | d) ₹1,00,000 |

OR

When fluctuating capital method is used, interest on capital is:

- |                            |                            |
|----------------------------|----------------------------|
| a) Debited to Capital A/c  | b) Credited to Capital A/c |
| c) Credited to Current A/c | d) Not recorded            |
- 1
- 2 On 1st October, 2024, P, Q, and R entered into partnership sharing Profits & Losses in the ratio 4:3:3. R is guaranteed a minimum profit of ₹72,000 per annum. Any deficiency is to be borne by P and Q in the ratio 1:1.

For the year ended 31st March, 2025, the firm incurred a loss of ₹1,20,000.



OR

A, B, and C share profits 4:3:1. C retires. A and B decide to share profits 3:2. If the firm's goodwill is ₹2,00,000, what is the amount A and B will pay for C's share?

- a) A ₹1,20,000; B ₹80,000  
b) A ₹1,00,000; B ₹1,00,000  
c) A ₹40,000; B ₹20,000  
d) A ₹60,000; B ₹40,000

9. P, Q, and R decided to dissolve their firm. R was entrusted with the dissolution process and was allowed a remuneration of ₹20,000. Actual realisation expenses incurred amounted to ₹25,000, but these were paid by partner P.

By what amount will the Realisation Account be debited?

- a) ₹20,000  
b) ₹25,000  
c) ₹45,000  
d) ₹5,000

10. X and Y share profits 3:2. Z is admitted and brings ₹1,50,000 as capital for 1/6th share. B, X, and Y agree to sacrifice their shares equally, how much goodwill will X get, if Z brings ₹32,000 goodwill?

- a) ₹15,000  
b) ₹20,000  
c) ₹10,000  
d) ₹18,000

OR

A and B share profits 2:1. They admit C, giving him 1/4th share in profits. C brings ₹60,000 as capital and ₹15,000 as goodwill. What will be C's capital in the books if the goodwill is adjusted in existing partners' capital accounts?

- a) ₹60,000  
b) ₹75,000  
c) ₹15,000  
d) ₹45,000

11. A building is shown in the books at ₹12,00,000, which is undervalued by 20%. What amount will be shown in the Balance Sheet of the reconstituted firm for the building?

- a) ₹14,40,000  
b) ₹12,00,000  
c) ₹15,00,000  
d) ₹10,00,000

Accountancy/MIS-Set-I/DR-II

From the given hypothetical situation, answer Q 12-14.

Sunrise Ltd. issued 50,000 9% debentures of ₹100 each at a discount of 4%. These debentures are to be redeemed at 8% premium at the end of 4 years. On the date of issue, the company had a balance in Securities Premium Reserve of ₹6,00,000 and Statement of Profit & Loss (Dr) of ₹4,00,000.

of ₹4,00,000.

12. The total cash to be received on issue of debentures will be:

- a) ₹50,00,000  
b) ₹48,00,000  
c) ₹52,00,000  
d) ₹46,00,000

13. The total amount to be paid at redemption of debentures:

- a) ₹54,00,000  
b) ₹56,00,000  
c) ₹52,00,000  
d) ₹48,00,000

14. If total redemption amount is ₹54,00,000 and Securities Premium Reserve + P&L balance = ₹10,00,000, then the amount that needs to be arranged from other sources:

- a) ₹44,00,000  
b) ₹40,00,000  
c) ₹50,00,000  
d) ₹54,00,000

15. X, Y, and Z share profits 5:3:2. On dissolution, the firm realised assets ₹3,40,000 (including cash) and had cash ₹60,000. Creditors were ₹2,50,000.

Question: What is the total amount available to partners after paying creditors?

- a) ₹90,000  
b) ₹1,00,000  
c) ₹1,50,000  
d) ₹1,20,000

16. Ravi and Karan are partners sharing profits and losses equally. They decided to share future profits and losses in the ratio 2:3. Their manager, Meera met with an accident in the office, and her claim for compensation amounted to ₹60,000. The firm had a Workmen Compensation Reserve of ₹1,00,000.

Which of the following statements holds true at the time of reconstruction?

Accountancy/MIS-Set-I/DR-II

a) The reserve will be used to pay the claim, reducing the amount to be shared by partners.

b) The reserve will remain intact, and claim will be paid out of partners' capital.  
c) The claim will be ignored as it occurred in the previous year.

17 d) Only the new profit-sharing ratio will be applied to pay the claim.  
A, B, and C are partners sharing profits and losses in the ratio 4:3:3. They admitted D into the partnership for a 1/5th share in future profits. It was agreed that C will have 1/4th share in future profits. The goodwill of the firm was valued at ₹2,40,000, and D was unable to bring any cash.

Required:

1. Calculate the new profit-sharing ratio.
2. Determine the sacrificing ratio of old partners.
3. Pass the journal entry for goodwill at the time of admission of D.

OR

Ravi, Sameer, and Meera were partners sharing profits and losses in the ratio 3:2:1. On the date of reconstruction, goodwill was appearing in the books at ₹3,00,000.

Goodwill of the firm was revalued at ₹6,00,000.  
Required:

1. Determine the gain or sacrifice of each partner due to the change in profit-sharing ratio.
2. Pass the necessary journal entry for goodwill adjustment in the books.

18 Pass necessary journal entries on the dissolution of partnership firm.

a) Q, a partner, was appointed to look after the dissolution process for which he was given remuneration of ₹10,000.  
Accountancy/MISSE-EDR-II

b) Realization expenses of ₹5,000 were to be borne by Pavi, a partner. However, it was paid by Hiteesh, another partner. It was to be recorded in the books.

c) Furniture of book value of ₹70,000 was sold for ₹68,000 by auction and auctioneer's commission was ₹2,000.

19 Mahi Ltd issued ₹50,00,000, 9% Debentures of ₹100 each on 1st April 2025, at 6% discount, redeemable after 5 years at 12% premium. The company had a balance of ₹3,00,000 in Securities Premium Reserve on the date of issue.

Pass journal entries for the issue of debentures and writing off loss on issue of debentures. Ankur and Vikram were partners sharing Profits & Losses in the ratio 3:2. They decided to share future Profits & Losses equally. On the date of reconstruction, there was Workmen Compensation Reserve of ₹3,00,000 in the books of accounts. Pass the necessary journal entries in the following cases:

- 20 A. Claim for Workmen Compensation is estimated at ₹1,20,000.  
B. There is no claim against Workmen Compensation.
- 21 Akshat Fashion Ltd. Was registered with a capital of ₹15,00,000 divided into equity shares of ₹ 100 each. The company invited applications for issuing 45,000 shares. The amount was payable as:

₹25 on application, ₹35 on allotment, ₹25 on first call and balance on final call.  
Applications were received for 42,000 shares and allotment was made to all the applicants. Ashray to whom 3,000 shares were allotted did not pay the final call. Kav, to whom 3,300 shares were allotted, did not pay both the calls. His shares were forfeited.

Present the share capital in the balance sheet of the company as per schedule III of the companies Act, 2013.

22 Aman, Bharat and Chirag were partners sharing profits and losses in the ratio 4:3:3. Their capitals on 1st April 2024 were ₹2,40,000, ₹1,80,000 and ₹1,20,000 respectively. After closing the accounts, it was discovered that:  
Accountancy/MISSE-EDR-II

- Interest on Capital @ 8% p.a. had not been provided.
- Aman was entitled to a salary of ₹24,000, which had been omitted.
- Bharat was entitled to a commission of 10% on net profit before commission. The profit had already been distributed among the partners in their old ratio. Pass the necessary Journal Entry to rectify the past omissions without altering the Profit Loss Account.

- 23 a) Agro India Ltd. Forfeited 150 Equity shares of ₹10 each issued at a premium of ₹5 per share, for non-payment of allotment money of ₹8 per share (including premium ₹5 per share), the first call of ₹2 per share and the final call of ₹3 per share. Out of these, 100 shares were reissued at ₹14 per share. Give Journal entries to record the forfeiture and reissue of shares.

- b) Abol Ltd. Forfeited 300 shares of ₹10 each, fully called up, held by Ram for non-payment of allotment money of ₹3 per share and first and final call money of ₹4 per share. Out of these, 250 shares were reissued to Shyam for a total payment of ₹2,000. Pass Journal entries for forfeiture and reissue.

- 24 Rohan, Karan and Saurter were partners sharing profits and losses in the ratio 4 : 3 : 3. Karan retired on 31st March 2025. On this date, after all necessary adjustments for Revaluation of Assets and Liabilities, Accumulated Profits/Losses and Goodwill, the amount due to him was worked out at ₹7,20,000. It was agreed that:

- Karan would be given machinery worth ₹40,000 as part of the settlement on the date of retirement.
  - The balance amount would be transferred to his Loan Account.
- Accountancy/MIS-6/1DR-II

- The remaining amount would be paid in three equal annual instalments along with interest @ 6% p.a. (as per the Partnership Act, in the absence of any agreement).
- The first instalment was paid on 31st March 2026.

You are required to:

- Pass the journal entry for the immediate payment on the date of retirement, and
  - Prepare Karan's Loan Account till it is fully settled.
- 25 Pooja and Ramesh are partners sharing profits and losses in the ratio 3:2. Their Balance Sheet as on 31st March 2025 was:

Balance Sheet

Liabilities	Amount (₹)	Assets	Amount (₹)
Creditors	50,000	Cash	70,000
General Reserve	30,000	Debtors	60,000
Capital:		Stock	50,000
Pooja -	1,50,000	Machinery	80,000
Ramesh -	1,20,000	Building	70,000
<b>Total</b>	<b>3,30,000</b>	<b>Total</b>	<b>3,30,000</b>

Ravi is admitted as a new partner on 1st April 2025 on the following terms:

- He will bring ₹1,20,000 as capital.
  - Goodwill of the firm is valued at ₹80,000, which he will bring in cash for his share.
  - Revaluation of assets and liabilities:
    - Stock increased by ₹5,000
    - Debtors reduced by ₹3,000
    - Machinery reduced by ₹10,000
    - Creditors increased by ₹2,000
- Accountancy/MIS-6/1DR-II

4. The new profit-sharing ratio of Pooja, Rameeh, and Ravi is 2:2:1. You are required to:

1. Prepare Revaluation Account.
2. Prepare Partners' Capital Accounts.

OR

Ravi, Sameer and Deepak were partners sharing profit and losses in the ratio 4 : 3 : 3. Their Balance Sheet as at 31 March 2025 was:

Liabilities	Amount (₹)	Assets	Amount (₹)
Creditors	30,000	Cash	40,000
General Reserve	40,000	Debtors	70,000
Capital:		Stock	80,000
Ravi —	1,20,000	Furniture	90,000
Sameer —	90,000	Accumulated	
		Depreciation on Furniture	(30,000)
Deepak —	60,000	Building	1,50,000
Profit & Loss A/c	50,000	Prepaid Expenses	5,000
Outstanding Expenses	10,000	Goodwill	20,000
Bills payable	25,000		
<b>Total</b>	<b>4,25,000</b>	<b>Total</b>	<b>4,25,000</b>

On the above date Sameer retired and his share was acquired equally by Ravi and Deepak. The following adjustments were agreed upon at the time of retirement:

1. Credit Provision for Doubtful Debts @ 5% on debtors.
2. Market value of Building is now 1,40,000 downwards.
3. Stock was revalued at ₹92,000. Creditors of ₹20,000 took over stock worth ₹12,000 in

settlement of their claims.

Accountancy/NT/Sec-I/DR-II

4. Goodwill of the firm was valued at ₹90,000.
5. Prepaid expenses are worthless. Outstanding expenses become ₹15,000.
6. ₹40,000 was immediately paid to Sameer on his retirement. The remaining amount due to Sameer was transferred to his loan account.

Prepare :

- Revaluation Account
- Partners' Capital Accounts.

25. Space Orbit Ltd. was registered with an authorised capital of ₹25,00,000 divided into 2,50,000 shares of ₹10 each. The company offered 90,000 shares for public subscription payable 3 on application and ₹8 on allotment (allotment includes ₹1 per share as securities premium). The public applied for 1,20,000 shares and pro-rata allotment was made (each applicant allotted 3 shares for every 4 applied). Remaining application money was refunded. Riya, holding 7,000 shares, failed to pay allotment money. Her shares were forfeited and later 4,000 of her forfeited shares were re-issued at ₹ 8 per share (i.e. at a discount of ₹ 2 per share). Prepare the necessary journal entries in the books of Space Orbit Ltd.

OR

- CRVA Ltd. was registered with an authorised capital of 2,00,000 equity shares of ₹100 each. The company offered 60,000 shares for public subscription at 25% premium. The share was payable as ₹40 on application and balance on allotment, with premium. Public had applied for 85,000 shares. Pro-rata allotment was made in the ratio of 5:4 and remaining applications were sent letters of regret. Mr. Anand holding 4,000 shares failed to pay allotment money and his shares were forfeited. Out of these 3,000 shares were re-issued at a discount of ₹20 per share. Pass necessary entries in the books of the CRVA Ltd.

Part - B - Analysis of Financial Statements

27. Which account on Inveatment will be presented in the balance sheet of a company use the sub-head \_\_\_\_\_

- a) Other current assets
  - b) Inventories
  - c) Short term loan and advances
  - d) Current Investment
28. If revenue from operations is ₹120,000, gross profit is 25% on cost and operating expenses ₹80,000, the operating profit ratio will be:
- a) 100%
  - b) 50%
  - c) 90%
  - d) 10%

OR

- Inventory Turnover Ratio of company was 5 times. The firm had Revenue from operations of ₹ 1,00,000 and Gross Profit was 25% of Cost of Revenue from Operations. Determine the amount of Opening Inventory if Closing Inventory was ₹ 60,000
- a) ₹ 80,000
  - b) ₹ 1,00,000
  - c) ₹ 1,20,000
  - d) ₹ 60,000
29. Which of the following is not an Inveatment (Cash flow)?
- a) Purchase of land for ₹10,000
  - b) Sale of land for ₹20,000 cash
  - c) Sale of 2,000 shares listed as Inveatment for ₹15 each
  - d) Purchase of equipment for ₹200 cash

OR

- Which of the following transactions will not result into flow of cash:
- a) Issue of equity shares of ₹1,00,000
  - b) Purchase of machinery of ₹1,75,000
  - c) Redemption of the debentures of ₹2,50,000
  - d) Cash deposited into bank ₹15,000
- Accountancy/201/504/4/20K/17

Which of the following will be treated as Cash Flow from Operating Activities in the case of a finance company?

- a) Interest received
- b) Machinery sold
- c) Issue of equity shares
- d) Interest paid on debentures

Complete the following Comparative Balance Sheet as at March 31, 2023 and March 31, 2024

PARTICULARS	31st March 2023	31st March 2024	Absolute Change	Percentage Change
Shareholders' Funds	8,00,000	10,00,000	2,00,000	??
Non-current Liabilities	4,00,000	??	Nil	0
Current Liabilities	3,00,000	4,50,000	1,50,000	??
TOTAL	15,00,000	??	3,50,000	??
Non-current Assets	9,00,000	??	??	60
Current Assets	??	??	??	??
TOTAL	15,00,000	18,50,000	??	23.33

OR

The following is the Income Statement of Delta Ltd for the year ended 31st March 2024

Particulars	Amount (₹)
Revenue from Operations	20,00,000
Other Income	1,00,000
Cost of Goods Sold	12,00,000
Operating Expenses	3,00,000
Interest Expense	50,000
Tax Expense	1,50,000

32 (i) Give two examples of Non-current Assets except Property, Plant & Equipment, Goods and Patents.

(ii) Under which head will you show the Balance of Securities Premium Reserve in the Balance Sheet of a Company?

(iii) Where will you disclose Dividend Paid in the Company's Financial Statements?

33 Current Ratio of Aman Traders is 1.5 : 1. For each of the following transactions state whether the Current Ratio will increase, decrease or have no change — and give a brief reason.

- a) Goods purchased on credit.
- b) Outstanding expenses paid (by cash).
- c) Sale of a fixed asset at a 20% loss (proceeds received in cash).
- d) Issue of debentures at a premium to vendors in exchange for a fixed asset.

OR

From the following information, calculate Trade Payables Turnover Ratio:

- Cost of Revenue from Operations (Cost of Goods Sold): ₹8,00,000
- Gross Profit on Cost 20%
- Cash Purchases: 25% of Total Purchases
- Opening Creditors: ₹1,50,000
- Closing Creditors: ₹2,50,000
- Bills Payable: Opening ₹30,000 and Closing ₹40,000

34 From the following details of Machin Ltd, prepare Cash Flow from Operating Activities for the

year ended 31st March 2025 as per Ind AS-3  
Accountancy/XII/Sel-LDR-II

Balance Sheet Extracts:

Particulars	31.03.2024 (₹)	31.03.2025 (₹)
Profit & Loss A/c	1,50,000	2,40,000
Trade Receivables	3,00,000	2,20,000
Inventories	2,50,000	3,00,000
Trade Payables	1,80,000	2,50,000
Outstanding Wages	30,000	20,000
Prepaid Insurance	25,000	15,000

Additional information :

1. Net profit includes:  
Profit on Sale of Machinery ₹20,000  
Interest Income ₹10,000
  2. Depreciation charged during the year was ₹50,000
  3. A machine costing ₹1,00,000 (Accumulated Depreciation ₹60,000) was sold at a loss of ₹20,000
  4. Income Tax paid during the year ₹40,000
  5. Provision for Tax at the end of the year was ₹20,000
- Prepare Cash Flow from Operating Activities.

**II Pre-Board Examination, 2025-26**

Sub : Geography

Time : 3.00 Hrs. ]

Class - XII

[ M. M. : 70

**General Instructions:**

Read the following instructions carefully and follow them:

- (i) This questions paper contains 30 questions. All questions are compulsory.
- (ii) Question paper is divided into five sections A, B, C, D and E.
- (iii) Section A Questions no. 1 to 17 are Multiple Choice type questions. Each question carries 1 mark.
- (iv) Section B Questions no. 18 and 19 are Source-based questions. Each question carries 3 marks.
- (v) Section C Questions no. 20 to 23 are Short Answer type questions. Each question carries 3 marks. Answer to these questions shall be written in 80 to 100 words.
- (vi) Section D Questions no. 24 to 28 are Long Answer type questions. Each question carries 5 marks. Answer to these questions shall be written in 120 to 150 words.
- (vii) Section E Questions no. 29 and 30 are Map-based questions. Each question carries 5 marks.
- (viii) In addition to this, NOTE that a separate question has been provided for Visually Impaired candidates in lieu of questions having visual inputs, map etc. Such questions are to be attempted by Visually Impaired candidates only.
- (ix) There is no overall choice given in the question paper. However, an internal choice has been provided in a few questions in all sections other than Section A.

**सामान्य निर्देश:**

निम्नलिखित निर्देशों को ध्यान पूर्वक पढ़ें और उनका पालन करें:

- (i) इस प्रश्न पत्र में 30 प्रश्न हैं। सभी प्रश्न अनिवार्य हैं।
- (ii) प्रश्न पत्र पांच खंडों ए, बी, सी, डी और ई में विभाजित है।

(iii)

खंड ए प्रश्न संख्या। 1 से 17 तक बहुविकल्पीय प्रकार के प्रश्न हैं। प्रत्येक प्रश्न 1 अंक का है।

(iv) खंड बी प्रश्न संख्या। 18 और 19 खंड-आधारित प्रश्न हैं। प्रत्येक प्रश्न 3 अंक का है।

(v) अनुभाग की प्रश्न संख्या। 20 से 23 संयुक्त रूप से प्रश्न हैं। प्रत्येक प्रश्न 3 अंक का है। इन प्रश्नों का 80 से 100 शब्दों में लिखना होगा।

(vi) खंड सी प्रश्न संख्या। 24 से 28 तक दीर्घ उत्तरीय प्रश्न हैं। प्रत्येक प्रश्न 5 अंक का है। इन प्रश्नों उत्तर 120 से 150 शब्दों में लिखना होगा।

(vii) खंड ई प्रश्न संख्या। 29 और 30 मानचित्र-आधारित प्रश्न हैं। प्रत्येक प्रश्न 5 अंक का है।

के स्थान पर एक अलग प्रश्न प्रदान किया गया है। ऐसे प्रश्नों को केवल दृष्टिकोणित उम्मीदवारों को ही हल किया जाना है।

(ix) प्रश्न पर मे कोई समय विकल्प नहीं दिया गया है। हालांकि, इसके अलावा सभी अनुभागों में कुछ प्रश्नों में आंतरिक विकल्प प्रदान किया गया है।

Section - A

Questions no. 1 to 17 are Multiple Choice Type Questions.

1. What is the main focus of human development?

A. Economic growth only

B. Income distribution

C. Expanding people's choices and improving their well-being

D. Industrial development

मानव विकास का मुख्य उद्देश्य क्या है?

A. केवल आर्थिक वृद्धि

B. आय का वितरण

C. लोगों की पसंदों का विस्तार और जीवन गुणवत्ता में सुधार

D. औद्योगिक विकास

Geography XI/MS-1/DR-II

The Human Development Index (HDI) was first published by which organization?

A. UNESCO

B. World Bank

C. UNDP

D. IMF

मानव विकास सूचकांक (HDI) सर्वप्रथम किस संस्था द्वारा प्रकाशित किया गया था?

A. यूएनडीपी

B. अंतर्राष्ट्रीय मुद्रा कोष

C. विश्व बैंक

D. पारंपरिक कृषि

plantation agriculture is characterized by —

(a) Small farms and local markets

(b) Multiple crops for local consumption

(c) shifting cultivation and mixed farming

(d) Large estates and single cash crops

काठमांडू जूनि की विशेषता है —

A. छोटे खेत और स्थानीय बाजार

B. बड़े खेत और एक ही नगरीय बाजार

C. घुस खेती और मिश्रित कृषि

D. स्थानीय उपभोग के लिए विभिन्न फसलें

Which two canals are connecting the North American Great Lakes?

A. Suez Canal & Panama Canal

B. St. Lawrence & Welland Canal

C. Volga & Don Canal

D. Erie Canal & Champlain Canal

कौन सी दो नदरें उत्तरी अमेरिका की बड़े झीलों को जोड़ती हैं?

A. वॉलगा नहर और डोन नहर

B. स्. लॉरेंस और वेल्लैंड नहर

C. वोलगा और डोन नहर

D. एरी नहर और चैम्पलेन नहर

Assertion (A): Developed countries have a larger share in world trade compared to developing countries.

Reason (R): Developed countries have advanced technology and better infrastructure for production and transport.

(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.

Geography XI/MS-1/DR-II

कथन (A): विकसित देशों का निर्रत व्यापार में हिस्सा विकसित देशों के तुलना में अधिक है।  
 कारण (R): विकसित देशों के पास उच्च तकनीक और बेहतर उत्पादन व परिवहन क्षमताएँ हैं।

- (a) A और R दोनों सही हैं और R, A का सही व्याख्या है।
- (b) A और R दोनों सही हैं लेकिन R, A का सही व्याख्या नहीं है।
- (c) A सही है लेकिन R गलत है।
- (d) A गलत है लेकिन R सही है।

6 Assertion (A): Over-dependence on groundwater for irrigation has led to the depletion of many parts of India.  
 Reason (R): Groundwater is a renewable resource and can never be exhausted.

- (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.

अभिप्राय (A): सिंचन के लिए भू-सतह पर अत्यधिक निर्भरता ने भारत के कई हिस्सों में पानी के स्रोतों को कम किया है।  
 कारण (R): भूजल एक नवीकरणीय स्रोत है और कभी समाप्त नहीं हो सकता।

- (a) A और R दोनों सही हैं और R, A का सही व्याख्या है।
- (b) A और R दोनों सही हैं लेकिन R, A का सही व्याख्या नहीं है।
- (c) A सही है लेकिन R गलत है।
- (d) A गलत है लेकिन R सही है।

7 Which of the following pairs is not matched correctly?  
 a. Water Act - 1974  
 b. Environment Protection Act - 1986  
 c. Water Cess Act - 1977  
 d. The central pollution control board - 1997

Geography/MIS-II/DR-II  
 The central pollution control board - 1997

निम्न से कोष का जोड़ा सही से देव नहीं हुआ है?  
 बरत अधिनियम - 1974  
 वरत अधिनियम - 1977  
 वरत अधिनियम - 1977  
 वरत अधिनियम - 1977

- 1. वरत अधिनियम - 1974
- 2. वरत अधिनियम - 1977
- 3. वरत अधिनियम - 1977
- 4. वरत अधिनियम - 1977

A worker is known as marginal worker, who works for  
 A. More than 183 days  
 B. Less than 183 days  
 C. 183 दिन से कम काम करता है  
 D. 183 दिन से ज्यादा काम करता है

Arrange the following states in order of their population density from highest to lowest.  
 1. Bihar  
 2. Uttar Pradesh  
 3. West Bengal  
 4. Maharashtra

Codes:  
 A. 1, 4, 3, 2  
 B. 4, 3, 2, 1  
 C. 3, 2, 1, 4  
 D. 2, 1, 4, 3

प्रशिक्षित श्रमिकों को उनके उत्पादन मात्रा के अनुसार उत्पादों से मिलान करने के उपलब्ध कराते।  
 1. बिहार  
 2. महाराष्ट्र  
 3. उत्तरप्रदेश  
 4. पश्चिम बंगाल

Match the column A and column B and choose the correct option below?  
 A. 1, 4, 3, 2  
 B. 4, 3, 2, 1  
 C. 3, 2, 1, 4  
 D. 2, 1, 4, 3

State  
 1) Lignite coal  
 2) Petroleum deposits  
 3) Kerala  
 4) Gujarat  
 5) Theekun  
 6) Sandstone

ii) iii) iv)

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

किसी A और किसी B को गैर को और नीचे की ओर पढ़ें

उत्तर

- i) उत्तराखण्ड **विद्युत (व्यक्ति)**
- ii) केरल **1) विश्व कौशल**
- iii) गुजरात **2) वैश्वीकरण विज्ञान**
- iv) तमिलनाडु **3) परिवहन**
- 1) ii) iii) iv) **4) बहु-उत्पादक**

11 The concept of sustainable development was first popularized by which report?

- A. Club of Rome Report
- B. Brundtland Report (Our Common Future)
- C. Rio Earth Summit Report
- D. Human Development Report

सही विकल्प की पहचान की सबसे पहले किस रिपोर्ट का संशोधन किया गया था?

- A. क्लब ऑफ रोम रिपोर्ट
- B. ब्रुन्डलैंड रिपोर्ट (आम सामान्य भविष्य)
- C. रियो जर्सेट रिपोर्ट
- D. मानव विकास रिपोर्ट

Which of the following is an example of regional planning in India?

- A. Five Year Plans
- B. Hill Area Development Programme
- C. Green Revolution
- D. Operation Flood

निम्नलिखित में से भारत में क्षेत्रीय योजना का उदाहरण कौन-सा है?

- A. पांचवर्षीय योजनाएं
- B. पहाड़ी क्षेत्र विकास कार्यक्रम
- C. हरित क्रांति
- D. शेर क्रांति (ऑपरेशन फ्लूड)

Which of the following ports is a tidal port?

- A. Kandla
- B. Mumbai
- C. Chennai
- D. Vishakhapatnam

निम्नलिखित में से कौन सा वृद्धावस्था ज्वारीय बंदरगाह है?

- A. कान्दला
- B. मुंबई
- C. चेन्नई
- D. विशाखापट्टणम

Assertion (A): India's trade is mainly concentrated with a few developed countries.

Reason (R): Developed countries have a higher demand for primary products only.

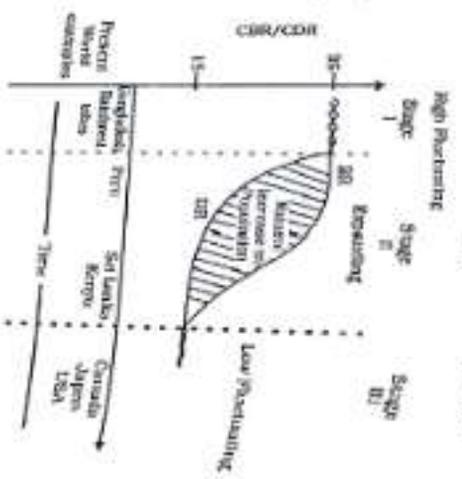
- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

कथन A: भारत का व्यापार मुख्य रूप से विकसित देशों के साथ केंद्रित है।

कारण R: विकसित देशों में केवल प्राथमिक उत्पादों की मांग अधिक होती है।

- (a) A और R दोनों सही हैं और R, A का सही व्याख्यान नहीं है।
- (b) A और R दोनों सही हैं लेकिन R, A का सही व्याख्यान नहीं है।
- (c) A सही है लेकिन R गलत है।
- (d) A गलत है लेकिन R सही है।

Read the graph and answer the following questions no.15-17:



- 15 भारत के अग्रणी जनसंख्या के सर्वाधिक परिवर्तन काल है
- A. प्रारंभ - स्थायी  
B. प्रारंभ - प्रसृत  
C. प्रसृत - प्रसृत  
D. स्थायी - प्रारंभ
- How does the natural increase in population occur as per the graph?
- A. Death rate + Birth rate  
B. Birth rate - Death rate  
C. Growth rate - Death rate  
D. Birth rate + Migration
- 16 विश्वविज्ञान में तेजी से बढ़ते हुए में जनसंख्या में परिवर्तन का कारण क्या है?
- A. स्थायी  
B. प्रसृत  
C. प्रसृत - स्थायी  
D. स्थायी
- Which of the following country has large portion of old age population among others?
- A. Bangladesh  
B. Iran  
C. Peru  
D. Japan
- 17 विश्वविज्ञान में तेजी से बढ़ते हुए में जनसंख्या में परिवर्तन का कारण क्या है?
- A. प्रसृत  
B. प्रसृत  
C. प्रसृत II  
D. प्रसृत I और प्रसृत II
- Geography: XI/2024-25/20-21

Read the question and answer the following questions no.15-17:

The net addition to population is high in which of the following demographic transition stages?

A. Stage I  
B. Stage II  
C. Stage III  
D. Both Stage I and Stage II

The following questions are for Visually Impaired Candidates only in lieu of Q. No. 15, 16 & 17.

- Q15. How many stages are in demographic transition theory?
- A. 1  
B. 2  
C. 3  
D. 4
- Q16. Which stage is characterized by high birth rate and high death rate?
- A. प्रारंभ - स्थायी  
B. प्रसृत - प्रसृत  
C. प्रसृत - स्थायी  
D. स्थायी - प्रसृत
- Q17. Which of the following country has large proportion of old age population among others?
- A. Japan  
B. India  
C. Iran  
D. Canada
- Geography: XI/2024-25/20-21

Questions number 18 and 19 are Source-based Questions.

18

Cyberspace is the world of electronic computerised space. It is enorm passed by the In Such as the World Wide Web (www). In simple words, it is the electronic digital world communicating or accessing information over computer networks without physical travel of the sender and the receiver. It is also referred to as the Internet. Cyberspace is everywhere. It may be in an office, sailing boat, flying plane and virtually anywhere. The speed at which this electronic network has spread is unprecedented. In human history, there were less than 50 million internet users in 1995, about 400 million in 2000 A.D. And now to the developing countries. The percentage share of U.S.A. has dropped from 66 in 1995 to only 25 in 2005. Now the majority of the world's users are in U.S.A., U.K., Germany, Japan, China and India.

- As billions use the Internet each year, cyberspace will expand the contemporary economic and social space of humans. Through e-mail, e-commerce, e-learning and e-governance. Internet together with fax, television and radio will be accessible to more and more people all over the world and time. It is these modern communication systems, more than transportation that has made the concept of global village a reality.
- 18.1 Writes uses of internet?
- 18.2 Define internet?
- 18.3 Writes name of the majority of the world's users of the electronic device?

18.1 इंटरनेट का उपयोग करने वाले लोगों की संख्या में तेजी से वृद्धि हो रही है। यह एक वैश्वीकरण है जो लोगों को एक ही जगह पर जोड़ता है। यह ई-मेल, ई-कॉमर्स, ई-लर्निंग और ई-गवर्नंस के माध्यम से आर्थिक और सामाजिक अंतरिक्ष को विस्तार देता है। फोन, टेलीविजन और रेडियो के साथ-साथ, इंटरनेट और अन्य आधुनिक संचार प्रणालियाँ, परिवहन प्रणालियों से अधिक, ग्लोबल विलेज का वास्तविक अर्थ बनाती हैं।

18.2 इंटरनेट एक वैश्वीकरण है जो लोगों को एक ही जगह पर जोड़ता है। यह ई-मेल, ई-कॉमर्स, ई-लर्निंग और ई-गवर्नंस के माध्यम से आर्थिक और सामाजिक अंतरिक्ष को विस्तार देता है। फोन, टेलीविजन और रेडियो के साथ-साथ, इंटरनेट और अन्य आधुनिक संचार प्रणालियाँ, परिवहन प्रणालियों से अधिक, ग्लोबल विलेज का वास्तविक अर्थ बनाती हैं।

18.3 संयुक्त राज्य अमेरिका, यूनाइटेड किंगडम, जर्मनी, जापान, चीन और भारत।

Questions number 18 and 19 are Source-based Questions.

18.1 Write the uses of internet?

18.2 Define internet?

18.3 Write the name of the majority of the world's users of the electronic device?

18.1 इंटरनेट का उपयोग करने वाले लोगों की संख्या में तेजी से वृद्धि हो रही है। यह एक वैश्वीकरण है जो लोगों को एक ही जगह पर जोड़ता है। यह ई-मेल, ई-कॉमर्स, ई-लर्निंग और ई-गवर्नंस के माध्यम से आर्थिक और सामाजिक अंतरिक्ष को विस्तार देता है। फोन, टेलीविजन और रेडियो के साथ-साथ, इंटरनेट और अन्य आधुनिक संचार प्रणालियाँ, परिवहन प्रणालियों से अधिक, ग्लोबल विलेज का वास्तविक अर्थ बनाती हैं।

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18.3 संयुक्त राज्य अमेरिका, यूनाइटेड किंगडम, जर्मनी, जापान, चीन और भारत।

19

19.1 Write the uses of internet?

19.2 Define internet?

19.3 Write the name of the majority of the world's users of the electronic device?



- 19.1 इंटरनेट का उपयोग करने वाले लोगों की संख्या में तेजी से वृद्धि हो रही है। यह एक वैश्वीकरण है जो लोगों को एक ही जगह पर जोड़ता है। यह ई-मेल, ई-कॉमर्स, ई-लर्निंग और ई-गवर्नंस के माध्यम से आर्थिक और सामाजिक अंतरिक्ष को विस्तार देता है। फोन, टेलीविजन और रेडियो के साथ-साथ, इंटरनेट और अन्य आधुनिक संचार प्रणालियाँ, परिवहन प्रणालियों से अधिक, ग्लोबल विलेज का वास्तविक अर्थ बनाती हैं।
- 19.2 इंटरनेट एक वैश्वीकरण है जो लोगों को एक ही जगह पर जोड़ता है। यह ई-मेल, ई-कॉमर्स, ई-लर्निंग और ई-गवर्नंस के माध्यम से आर्थिक और सामाजिक अंतरिक्ष को विस्तार देता है। फोन, टेलीविजन और रेडियो के साथ-साथ, इंटरनेट और अन्य आधुनिक संचार प्रणालियाँ, परिवहन प्रणालियों से अधिक, ग्लोबल विलेज का वास्तविक अर्थ बनाती हैं।
- 19.3 संयुक्त राज्य अमेरिका, यूनाइटेड किंगडम, जर्मनी, जापान, चीन और भारत।

Note- The following question is for Visually Impaired candidates only in lieu of question no. 19

- 19. Write any three features of clustered settlements?  
ग्रामीण बसियों की कोई भी तीन विशेषताएँ लिखें

Section - C

Questions number 20 to 23 are Short Answer Type Questions.

- 20. Write any three features of Neo determinism theory?  
नव निर्धारक संरचना की कोई भी तीन विशेषताएँ लिखें
- 21. Write any three differences between growth and development?  
What do equity and sustainability refer to within the concept of human development?  
OR  
बुद्धि और विकास में कोई भी तीन अंतर लिखिए ?

अथवा

- 22. Define the term tourism. Explain any four factors which attract tourists in the world.  
पर्यटन शब्द को परिभाषित करें। दुनिया में पर्यटन को आकर्षित करने वाली किसी चार कारणों के बारे में बात करें - कोई चार-को-भी चयन करें।

Section - D

- 23. What are objectives of 'Beti Bachao-Beti Padhao' social campaign of India?  
भारत के 'बेटी बचाओ-बेटी पढ़ाओ' सामाजिक अभियान के उद्देश्य बताइें
- 24. Explain the differences between mixed farming and dairy farming.  
मिश्रित कृषि और दही कृषि में अंतर स्पष्ट कीजिए ?
- 25. Discuss the major trends of modern industrial activities especially in the developed countries of the world.  
Geography-XI/SA-II/DR-II

Questions number 24 to 28 are Long Answer Type Questions. 5

OR

Differentiate between primary and secondary activities?  
प्रथम के विकास से द्वितीय के विकास में अंतर बताइें ?

अथवा

Discuss the problems of Indian agriculture?  
OR  
What are the important strategies for agricultural development followed in the post-independence period in India?  
स्वातंत्र्य काल की कृषिक्षेत्र की समस्याएँ बताइें ?

अथवा

What are the problems of Jains in India?  
OR  
Define the term air pollution. Explain main causes of air pollution and harmful effects of air pollution?  
भारत में जैन समाज की समस्याएँ बताइें ?

Section - E

- 27. Indian railway has facilitated the movement of both freight and passengers and contribute to the growth of economy. Support the statement with suitable arguments.  
भारतीय रेलवे ने भार और यात्रियों दोनों के आने-जाने को आसान बनाया है और अर्थव्यवस्था को बढ़ा देने में सहायता प्रदान है, इसी तर्कों के साथ पुष्टि बना कर स्पष्ट करें।
- 28. Describe the problems of Jains in India.  
OR  
Define the term air pollution. Explain main causes of air pollution and harmful effects of air pollution?  
भारत में जैन समाज की समस्याएँ बताइें ?
- 29. Discuss the major trends of modern industrial activities especially in the developed countries of the world.  
Geography-XI/SA-II/DR-II

Questions number 29 & 30 are Map based questions having 5 sub-parts each. 2X5=10



- 8) स्पष्ट रूप से चित्र में देखा गया क्षेत्र का नाम बताएं।
- 9) चित्र में एक क्षेत्र का नाम बताएं।
- 10) चित्र में एक क्षेत्र का नाम बताएं।

The following questions are for Visually Impaired Candidates only in lieu of Q. No.

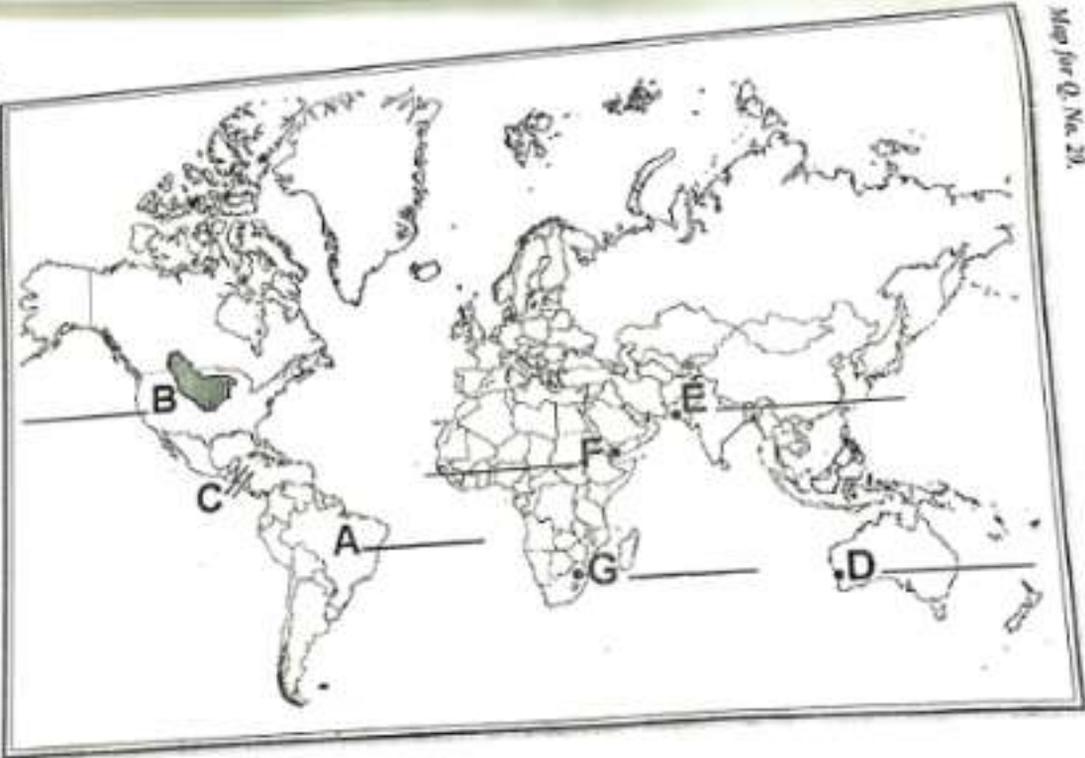
Answer any five questions out of the following:

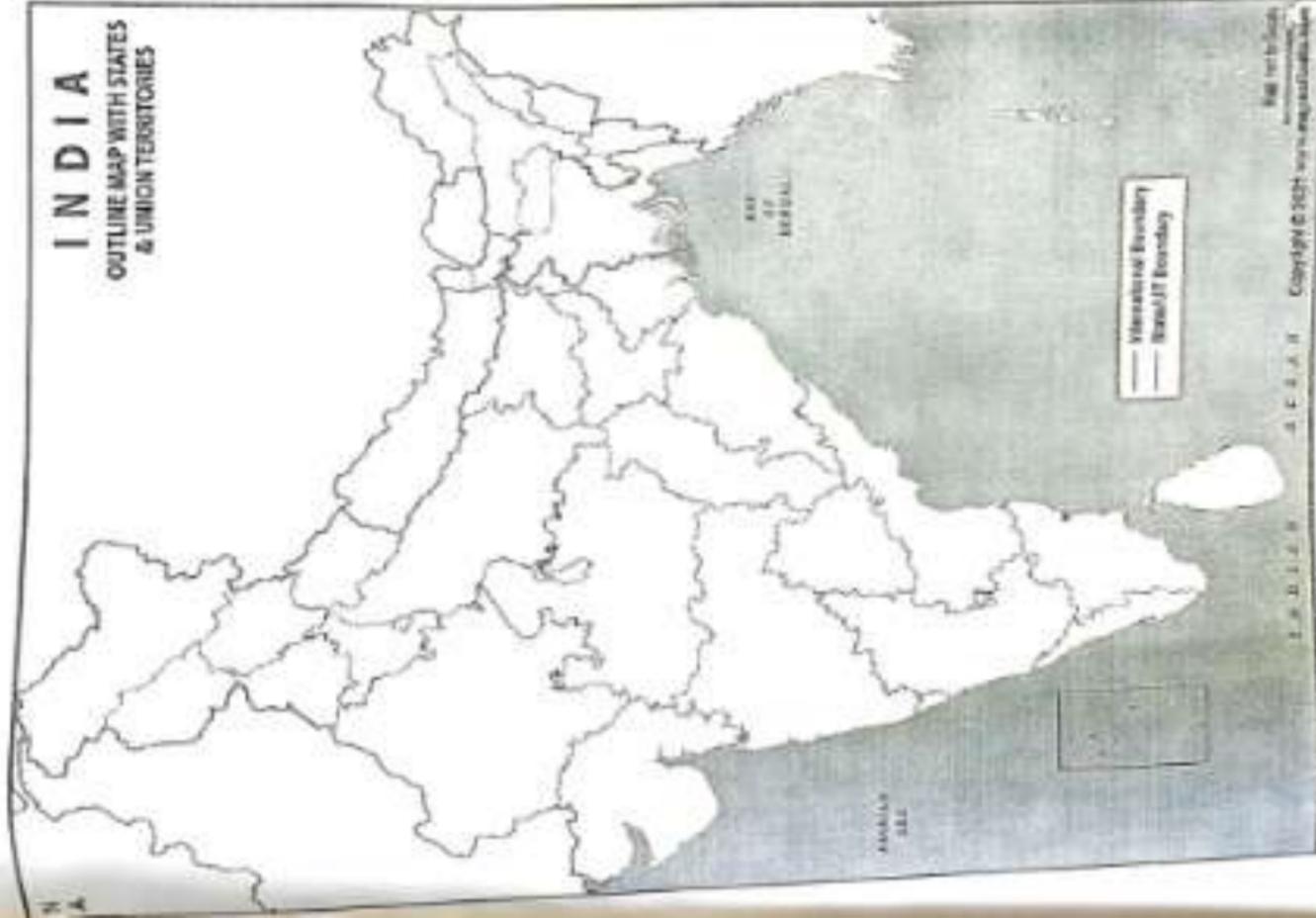
- A) Name the state leading in the production of cotton.
- B) Name the place where oil refinery is located in Bihar.
- C) Mention the name of an important tourist centre in Odisha.
- D) Mention the sea port along the coast of Andhra Pradesh.
- E) Mention a major sea port in Maharashtra.
- F) Name the state with the lowest density of population. (2011)

प्रश्नों में से किसी पांचों का उत्तर दें।

- A) कौन से राज्य का कपास उत्पादन में अग्रणी है?
- B) बिहार में तेल की रिफाइनरी कहाँ स्थित है?
- C) ओडिशा में एक प्रमुख पर्यटन केंद्र का नाम बताएं।
- D) आंध्र प्रदेश के तट पर एक प्रमुख बंदरगाह का नाम बताएं।
- E) महाराष्ट्र का एक प्रमुख बंदरगाह का नाम बताएं।
- F) जनघनत्व में सबसे कम राज्य का नाम बताएं। (2011)

Map for Q. No. 29.





**II Pre-Board Examination, 2025-26**

Sub. : Physics (0-42)

Time : 3.00 Hrs. ]

Class – XII

[ M. M. : 70

**General Instructions**

1. There are 33 questions in all. All questions are compulsory.
2. This question paper has five sections: Section A, Section B, Section C, Section D and Section E.
3. All the sections are compulsory.
4. Section A contains sixteen questions, twelve MCQ and four assertion reasoning based of 1 mark each, Section B contains five questions of two marks each, Section C contains seven questions of three marks each, Section D contains two case study-based questions of four marks each and Section E contains three long answer questions of five marks each.
5. There is no overall choice. However, an internal choice has been provided in one question in Section B, one question in Section C and all three questions in Section E. You have to attempt only one of the choices in such questions.
6. Use of calculators is not allowed.
7. You may use the following values of physical constants where ever necessary.

a.  $c = 3 \times 10^8 \text{ m/s}$

b.  $m_p = 9.1 \times 10^{-31} \text{ kg}$

c.  $m_n = 1.7 \times 10^{-27} \text{ kg}$

d.  $e = 1.6 \times 10^{-19} \text{ C}$

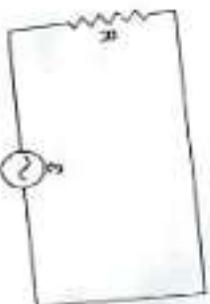
e.  $\mu_0 = 4\pi \times 10^{-7} \text{ T m A}^{-1}$

- f.  $h = 6.63 \times 10^{-34} \text{ J s}$   
 g.  $E_g = 8.854 \times 10^{-12} \text{ C}^2/\text{N}\cdot\text{m}^2$   
 h. Avogadro's number =  $6.023 \times 10^{23}$  per gram mole

ALL THE SECTIONS ARE COMPULSORY  
 SECTION - A

1. A positive point charge  $q$  of mass  $m$  is released from rest in a uniform electric field directed along the  $x$  axis. After covering a distance  $d$  in the given field, the charge will gain a velocity equal to  
 A.  $\sqrt{(qEd/m)}$   
 B.  $(qEd/m)$   
 C.  $(2qEd/m)$   
 D.  $\sqrt{(2qEd/m)}$
2. What should be the charge on a sphere of radius  $4 \text{ cm}$ , so that when it is brought in contact with another sphere of radius  $2 \text{ cm}$  carrying a charge of  $10 \mu\text{C}$ , there is no transfer of charge from one sphere to the other?  
 A.  $20 \mu\text{C}$   
 B.  $10 \mu\text{C}$   
 C.  $40 \mu\text{C}$   
 D.  $5 \mu\text{C}$
3. When the current through a coil increases at a constant rate, the induced emf is  
 A. Constant  
 B. Increasing  
 C. Decreasing  
 D. zero
4. To convert a galvanometer into an ammeter, we should  
 A. connect a high resistance in series  
 B. connect a low resistance in parallel  
 C. connect a low resistance in series  
 D. connect a high resistance in parallel

A pure resistor is connected to an AC power source as shown below.



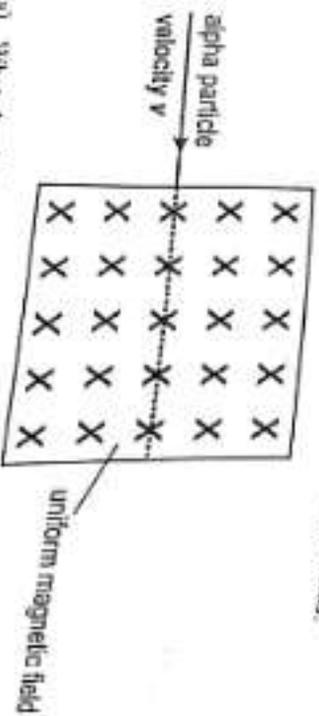
Which of the following statement(s) is/are TRUE?

- I. The average current flowing through the circuit during one full cycle is zero.  
 II. The current in the resistor leads the voltage by  $\pi/2$ .  
 III. The average power dissipated by the resistor is zero.  
 A. only I  
 B. only I and III  
 C. only II and III  
 D. all I, II and III
6. The stopping potential  $V_0$  measured in a photoelectric experiment for a metal surface is plotted against frequency  $\nu$  of the incident radiation. Let  $m$  be the slope of the straight line so obtained. Then the value of charge of an electron is given by ( $h$  is Planck's constant)  
 A.  $m/h$   
 B.  $m/h$   
 C.  $hm$   
 D.  $1/(hm)$
7. A coil has 100 turns, each of area  $0.05 \text{ m}^2$  and total resistance  $1.5 \Omega$ . It is inserted in an inductor in a magnetic field of  $90 \text{ mT}$ , with its axis parallel to the field. The charge induced in the coil as the inductor is  
 A.  $0.3 \text{ mC}$   
 B.  $0.3 \text{ C}$   
 C.  $0.45 \text{ C}$   
 D.  $1.5 \text{ C}$

- A student performs an activity to measure the critical angles with different denser media placed in air. If  $v$  denotes the speed of light in different denser media than the student will arrive at a conclusion that the critical angle in given cases found to be
- independent of  $v$
  - directly proportional to  $v$
  - inversely proportional to  $v$
  - directly proportional to  $v^2$
- 9 The intensity at a point on the screen in Young's double slit experiment where the interfering waves of equal intensity (each) have a path difference of  $\lambda/2$ , is
- $2I$
  - $I/2$
  - $I$
  - $3I$
- 10 The shape of incident and refracted wave front of light wave propagating through a convex lens, when source of light is at infinity are respectively
- Planar and spherical
  - Spherical and spherical
  - Spherical and planar
  - Planar and planar
- 11 How does the distance of closest approach of an alpha particle in scattering experiment changes, when its bombarding velocity is made 3 times keeping the target experimenter
- becomes 9 times
  - becomes 1/3 times
  - becomes 1/9 times
  - becomes 3 times
- 12 A transformer steps down 120 V to 12 V. If secondary coil delivers 6 A, find the primary current (ideal transformer)
- 0.5 A
  - 0.6 A
  - 5 A
  - 60 A
- For Questions 13 to 16, two statements are given one labelled Assertion (A) and other labelled Reason (R). Select the correct answer to these questions from the options as given below.

- Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
  - Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
  - Assertion is true but Reason is false.
  - Both Assertion and Reason are false.
- 15 Assertion (A): The direction of the electric field is always perpendicular to the equipotential surface.  
Reason (R): Work done by the electric force in moving a charge between any two points on an equipotential surface is always non-zero
- 16 Assertion (A): The work function of a given material increases with an increase in the frequency of the incident radiation.  
Reason (R): As per Einstein's photoelectric equation  $h\nu = \phi + KE$ , work function  $\phi$  is directly proportional to the frequency  $\nu$  of the incident radiation.
- 15 Assertion (A): A convex lens may be diverging.  
Reason (R): The nature of a lens depends upon the refractive index of material of the lens and the surroundings.
- 16 Assertion (A): In a prism, once the angle of incidence exceeds the value corresponding to minimum deviation, the deviation increases further.  
Reason (R): At minimum deviation, the refractive index of the prism becomes maximum.
- SECTION - B**
- 17 Two copper wires, P and Q, of the same area of cross-section are joined in parallel. The combination of wires is connected across a variety of potential differences. If the lengths of the wires, P and Q are in the ratio 1:2, find the ratio of drift velocities of electrons in wires P and Q.

- 18 (i) An alpha particle is moving with a velocity  $v$ . It enters a magnetic field  $B$  shown below. The magnetic field is perpendicular and into the plane of paper. A uniform electric field is applied in the same region as the magnetic field so that alpha particle passes undeviated through the combined fields.



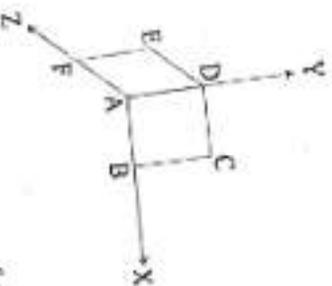
- (a) What should be the direction of the electric field?  
 (b) Without any change in the electric and magnetic field, the alpha particle is replaced by proton moving with a velocity  $v$ . Will there be any change or deviation in the path of the particle? Give a reason for your answer.
- OR
- 18 (ii) Define magnetic susceptibility. Write its dimensions. What would be the nature of magnetic material, if magnetic susceptibility is  
 (i) Positive  
 (ii) Negative

19 Suppose that the electric field part of an electromagnetic wave in vacuum is

$$E = [3.1 \text{ N/C}] \cos [(6.28 \text{ rad/m})y + 5.4 \times 10^8 \text{ rad/s}]t$$

- (a) What is the direction of propagation of electromagnetic wave?  
 (b) What is the wavelength of electromagnetic wave?  
 (c) Also write the expression for the relevant magnetic field vector.

- A loop, made of straight edges has six corners at  $A(0,0,0)$ ,  $B(1,0,0)$ ,  $C(1,1,0)$ ,  $D(0,1,0)$ ,  $E(0,1,1)$  and  $F(0,0,1)$ . A magnetic field  $B = B_0 (\hat{i} + \hat{k})$  T is present in the region. Find the flux passing through the loop ABCDEF?



- 21 By what factor does kinetic and potential energy of an electron in a hydrogen atom change as it moves from  $n = 1$  to  $n = 3$ ?

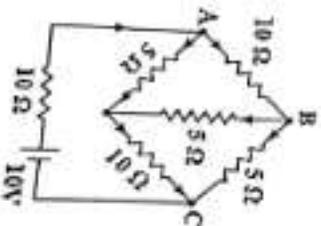
## SECTION - C

- 22 Derive an expression for total work done in rotating an electric dipole through an angle  $\theta$  in a uniform electric field. Hence, calculate the potential energy of the dipole and write conditions for stable and unstable equilibrium respectively.

OR

- (i) A parallel-plate capacitor with a plate separation  $d$  has a capacitance  $C_0$  in the absence of a dielectric. What is the capacitance when a slab of dielectric material of dielectric constant  $K$  and thickness  $d/3$  is inserted between the plates?  
 (ii) A parallel-plate capacitor is charged with a battery to a charge  $Q_0$ . The battery is then removed, and a slab of material that has a dielectric constant  $K$ , is inserted between the plates. Find the energy stored in the capacitor before and after the dielectric is inserted.

- 23 Determine the current in each branch of the network shown in figure.



- 24 There is a series LCR circuit with  $L = 5.0\text{H}$ ,  $C = 80\mu\text{F}$ ,  $R = 40\Omega$  connected to a variable frequency 240V source. Calculate
- The angular frequency of the source which drives the circuit at resonance.
  - The current at the resonating frequency.
  - The rms potential drop across the capacitor at resonance.

- 25 (a) Find the  $Q$  value of the following nuclear reaction:
- $${}_{6}^{12}\text{C} + {}_{6}^{12}\text{C} \rightarrow {}_{10}^{20}\text{Ne} + {}_{2}^{4}\text{He}$$
- Is this reaction exothermic or endothermic?
- Given:

$$m({}_{6}^{12}\text{C}) = 12.000000\text{u}$$

$$m({}_{10}^{20}\text{Ne}) = 19.992439\text{u}$$

$$m({}_{2}^{4}\text{He}) = 4.002603\text{u}$$

$$1\text{u} = 931\text{MeV}/c^2$$

- (b) Give reasons for the constancy of the binding energy in the range

$$30 < A < 170.$$

- 6 State Huygens principle. Verify Snell's law of refraction using Huygens principle.
- 7 Derive the Lens Maker's Formula for a thin lens placed in air, starting from the refraction at two spherical surfaces. The focal length of a convex lens made of glass ( $\mu = 1.5$ ) is 22 cm. What will be its new focal length when placed in a medium of refractive index 4/3?

- 28 Name the electronic device that acts like a one-way valve for electric current and produces an output whose frequency is twice that of the input. State the principle of its operation. Describe its construction with diagram and sketch the input and output waveforms.

## SECTION - D

- 29 A photoelectric experiment is performed using a tunable laser source whose frequency can be varied from  $5 \times 10^{14}\text{Hz}$  to  $12 \times 10^{14}\text{Hz}$ . The metal used as the cathode has a work function of 3.0 eV. During the experiment, the following observations are made:
- No electrons are emitted below a certain frequency.
  - At frequency  $8 \times 10^{14}\text{Hz}$ , the stopping potential is measured as 1.2 V.
  - Doubling the intensity at the same frequency increases photocurrent but does not change stopping potential.
  - A very large positive potential on the anode still produces a saturation current.
  - Using smaller metal with lower work function shifts the threshold frequency lower.
- (i) The threshold frequency  $f_0$  of the metal is closest to
- $3.0 \times 10^{14}\text{Hz}$
  - $5.0 \times 10^{14}\text{Hz}$
  - $7.2 \times 10^{14}\text{Hz}$
  - $4.83 \times 10^{14}\text{Hz}$

(II) The stopping potential of 1.2 V at frequency  $8 \times 10^{14}$  Hz suggests that the maximum photoelectron kinetic energy is

- A. 1.2 eV  
B. 0.8 eV  
C. 2.8 eV  
D. 3.0 eV

(III) Doubling the intensity of incident radiation at constant frequency will

- A. Double the stopping potential  
B. Increase photocurrent but not stopping potential  
C. Increase both photocurrent and stopping potential  
D. Increase stopping potential only

(IV) A student claims: "At high enough intensity, photoelectric emission can occur even below threshold frequency." This statement is

- A. Completely correct  
B. Correct only for UV light  
C. Incorrect because frequency controls emission, not intensity  
D. Correct only for very clean metal surfaces.

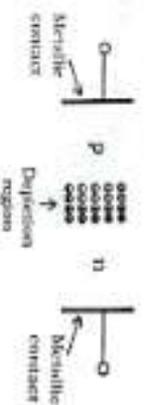
OR

(IV) Choose the correct statement:

- A. Photons of light show diffraction whereas electron do not show diffraction.  
B. Electrons have momentum whereas photons do not have momentum.  
C. Photons of light and electrons both exhibit dual nature.  
D. All electromagnetic radiations do not have photons.

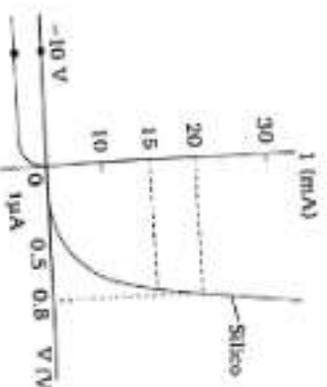
30. A semiconductor diode is basically a p-n

junction with metallic contacts provided at the ends for the application of an external Voltage.



4

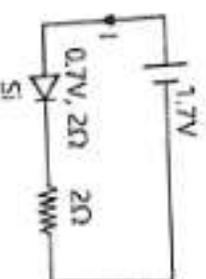
It is a two-terminal device. A p-n junction diode is symbolically represented as shown in fig. When an external voltage  $V$  is applied across a semiconductor diode such that p-side is connected to the positive terminal of the battery and n-side to the negative terminal it is said to be forward biased.



(I) The V-I characteristic of a silicon diode is shown in the Fig. Calculate the resistance of the Diode at  $I_F \sim 20$  mA.

- A. 10 m $\Omega$   
B. 40 m $\Omega$   
C. 10  $\Omega$   
D. 40  $\Omega$

(II) Find the value of current  $I$  in the circuit given below.



- A. 0.25 A  
B. 0.325 A  
C. 0.425 A  
D. 0.5 A



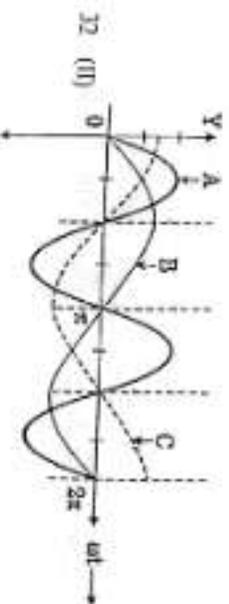
32 (1) (a) Derive an expression for the torque acting on a rectangular current loop suspended in a uniform magnetic field.

(b) A charged particle is moving in a circular path with velocity  $V$  in a uniform magnetic field  $B$ . It is made to pass through a sheet of lead and as a consequence, it loses one half of its kinetic energy without change in its direction.

(i) How will the radius of its path and

(ii) Its time period of revolution, change?

OR



A device 'X' is connected to an ac source  $V = V_0 \sin \omega t$ . The variation of voltage, current and power in one cycle is shown in the following graph.

(a) Identify the device 'X'.

(b) Which of the curves A, B and C represent the voltage, current and the power consumed in the circuit?

(c) How does its impedance vary with frequency of the ac source? Show graphically.

(d) Obtain an expression for the current in the circuit and its phase relation with ac voltage.

33 (1) (a) Draw a labelled ray diagram to show the image formation by an astronomical telescope in normal adjustment.

(b) Define magnifying power of an astronomical telescope in normal adjustment (i.e. when the final image is formed at infinity).

(c) A small telescope has an objective lens of focal length 144cm and an eyepiece of focal length 6cm. What is the magnifying power of the telescope if image is formed at infinity? What is the separation between objective and eyepiece?

OR

33 (II) (a) In a Young's double slit experiment, write the conditions for constructive and destructive interference.

(b) What are coherent sources? Why are they necessary for observing a sustained interference pattern?

(c) Two slits 0.1 mm apart are arranged 1.20 m from a screen. Light of wavelength 600 nm from a distant source is incident on the slits.

1. How far apart will adjacent bright interference fringes be on the screen?
- a. Find the angular width of the first bright fringe.

No. of Printed Pages : 15

(Set-II)

Exam (01)  
22/12/21 DR-II

## II Pre-Board Examination, 2025-26

Sub : Political Science

Time : 3.00 Hrs. ]

Class - XII

[ M. M. : 80

सामान्य निर्देश:

- प्रश्न पत्र पाँच खंडों (A, B, C, D और E) में विभाजित है, जिसमें कुल 30 प्रश्न हैं।
- सभी प्रश्न अनिवार्य हैं।
- प्रश्न संख्या 1-12 एक अंक के बहुविकल्पीय प्रश्न हैं।
- प्रश्न संख्या 13-18 दो अंकों के प्रश्न हैं। इन प्रश्नों के उत्तर 50-60 शब्दों से अधिक नहीं होने चाहिए।
- प्रश्न संख्या 19-23 चार अंकों के प्रश्न हैं। इन प्रश्नों के उत्तर 100-120 शब्दों से अधिक नहीं होने चाहिए। चार अंकों के प्रश्नों में दो प्रश्नों में आंतरिक विकल्प है।
- प्रश्न संख्या 24-26 अनुच्छेद, कार्टून और नक्शे पर आधारित प्रश्न हैं। उत्तर उसी अनुसार दें।
- प्रश्न संख्या 27-30 छह अंकों के प्रश्न हैं। इन प्रश्नों के उत्तर 170-180 शब्दों से अधिक नहीं होने चाहिए। छह अंकों के प्रश्नों में आंतरिक विकल्प है।

General instructions:

- The question paper consists of five sections (A, B, C, D and E) with 30 questions in total.
- All questions are compulsory.
- Question numbers 1-12 are multiple choice questions of one mark each.
- Question numbers 13-18 are of 2 marks each. Answers to these questions should not exceed 50-60 words each.
- Question numbers 19-23 are of 4 marks each. Answers to these questions should not exceed 100-120 words each. There is an internal choice in two of the 4 marks questions.
- Question numbers 24-26 are passage, cartoon, and map based questions. Answer accordingly.
- Question numbers 27-30 are of 6 marks each. Answers to these questions should not exceed 170-180 words. There is an internal choice in 6 marks questions.



Identify the correct one:

- (A) India Council - Congress party leader who directed Congress
- (B) Independent Member - Leader of the non-Congress welfare government
- (C) Jawahar Chaudhary - Leader of the non-Congress welfare government
- (D) Late Dr. B.R. Ambedkar - Leader of the non-Congress welfare government

Identify the correct one:

- (A) The first Prime Minister of India after independence was
- (B) Jawahar Lal Nehru
- (C) B.R. Ambedkar
- (D) Mahatma Gandhi

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Choose the correct one:

- (A) National parties are necessary preconditions for democratic government
- (B) National parties are alternative preconditions to political parties
- (C) National parties are necessary preconditions for democratic government
- (D) National parties are alternative preconditions to political parties

Choose the correct one:

- (A) Both statements 1 and 2 are true
- (B) Both statements 1 and 2 are false
- (C) Statement 1 is true but statement 2 is false
- (D) Statement 2 is true but statement 1 is false

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10. The mid-definition law (the standard) was added to the Constitution in

- (A) 1985
- (B) 1982
- (C) 1981
- (D) 1980

11. 1334 of the 1980s, first mentioned in 1980, was the first time that

- (A) was first reported
- (B) Charles Taylor
- (C) George Foreman
- (D) George Foreman

12. The headquarters of the United Nations Organization (UNO) is located in

- (A) Geneva
- (B) New York
- (C) London
- (D) Paris

13. Section - 2 (Group Answer Questions)

13. Section - 2 (Group Answer Questions)

14. Section - 2 (Group Answer Questions)

15. Section - 2 (Group Answer Questions)

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13. Section - 2 (Group Answer Questions)

14. Section - 2 (Group Answer Questions)

15. Section - 2 (Group Answer Questions)

Which is NOT true about CJI?

- (A) It was established in 1962
- (B) It can hear cases between individuals and states
- (C) It decides between states
- (D) It acts on national boundaries

Which of the following is correct about the CJI?

- (A) 60 years of age
- (B) 65 years of age
- (C) 70 years of age
- (D) 75 years of age

Why do judges retire when they are 62?

- (A) It is a basic constitutional provision
- (B) To judge corruption cases between states
- (C) It is a statutory provision
- (D) It is a judicial provision

Which of the following is NOT a function of the CJI?

- (A) To preside over the court
- (B) To appoint and remove judges
- (C) To maintain discipline in the court
- (D) To act as a mediator between states

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SECTION - D (Passage, Map and Chart-based Questions)

Read the passage carefully and answer the following questions.

The Central Law Council was established in 1930. The Council was constituted under the Central Law Council Act, 1930. The Council was constituted to advise the Government on matters relating to law and legal education. The Council was also entrusted with the task of preparing a model Bill of Rights for India. The Council was also entrusted with the task of preparing a model Bill of Rights for India.

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State	Number for the information used	Name of the State
I		
II		
III		
IV		

- (A) International Criminal Court
  - (B) International Court of Justice
  - (C) Permanent Court of Arbitration
  - (D) UN Tribunal
22. What is the principal jurisdiction of the UN?
- (A) to try and punish individuals accused of war crimes and crimes against humanity
  - (B) to settle international disputes between states
  - (C) to maintain international peace and security
  - (D) to coordinate the economic and social development of states
1. The court will settle international disputes between states.
  2. The court will settle international disputes between states and individuals.
  3. The court will settle international disputes between states and corporations.
  4. The court will settle international disputes between states and corporations.
  5. The court will settle international disputes between states and corporations.
  6. The court will settle international disputes between states and corporations.
  7. The court will settle international disputes between states and corporations.
  8. The court will settle international disputes between states and corporations.
  9. The court will settle international disputes between states and corporations.
  10. The court will settle international disputes between states and corporations.
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  16. The court will settle international disputes between states and corporations.
  17. The court will settle international disputes between states and corporations.
  18. The court will settle international disputes between states and corporations.
  19. The court will settle international disputes between states and corporations.
  20. The court will settle international disputes between states and corporations.
  21. The court will settle international disputes between states and corporations.
  22. The court will settle international disputes between states and corporations.
  23. The court will settle international disputes between states and corporations.
  24. The court will settle international disputes between states and corporations.
  25. The court will settle international disputes between states and corporations.

25. दिए गए चित्र का अध्ययन करें और नीचे दिए गए प्रश्नों के उत्तर दें।  
 26. Study the given picture and answer the questions that follow.



- Q कर्तून में सड़क दिक्कत प्रतीक है।  
 A) देश के लोग के रूप में उपभोग की जा रही पृथ्वी का  
 B) ऊर्जा के लिए समस्त सड़कें महादीपों का  
 C) पशु के लिए उपयोग की जा रही दुग्धित का  
 D) समझने के लिए सोचिए किर का रहे महासागरी का
- 1) What does the lighter in the cartoon symbolise?  
 A) The earth being consumed as a source of fuel  
 B) The continents being burned for energy  
 C) The world being used up for power  
 D) The oceans being exploited for its resources
- 2) कर्तून में उपस्थित की विचारधारा को तब तक विस्तार देना चाहिए।  
 A) यह दर्शाते हैं कि दुग्धित पृथ्वी का उपयोग कर रहे हैं।  
 B) यह दर्शाते हैं कि केवल दुग्धित ही जीवन संधि का कारण बन रहे हैं।  
 C) समझने की जरूरत है कि पृथ्वी का समस्त विस्तार के लिए  
 D) जीवोपार्थक जल का समस्त विस्तार के लिए

- 3) Why are the figures in the cartoon dressed like chimney?  
 A) To represent humans are supporting earth  
 B) To show only humans are causing global warming  
 C) To show importance of chimneys in cleaning factories  
 D) To show importance of industrial revolution
- 4) कर्तून का मुख्य विषय क्या हो सकता है।  
 A) तकनीकी उपकरणों का उपयोग  
 B) समझने की जरूरत है कि दुग्धित पृथ्वी का उपयोग  
 C) पशु के लिए उपयोग की जा रही दुग्धित का  
 D) समझने की जरूरत है कि पृथ्वी का समस्त विस्तार के लिए
- 5) The main theme of the cartoon could be:  
 A) The celebration of technological advancement  
 B) The impact of deforestation on wildlife  
 C) The role of industrial pollution in global warming  
 D) The importance of reducing waste to save planet
- 6) कर्तून के जल बाण का प्रतीक किसे दर्शाता है। यह दिक्कत के लिए कि।  
 A) केवल दुग्धित ही दुग्धित को सहे है।  
 B) केवल विचारधारा के दुग्धित में शोधन करने है।  
 C) समझने की जरूरत है कि दुग्धित पृथ्वी का उपयोग कर रहे हैं।  
 D) पृथ्वी को समस्त के लिए विचारधारा की जरूरत है कि दुग्धित पृथ्वी का उपयोग कर रहे हैं।
- 7) Hidden message has been shown on the push button of the lighter to show that  
 A) Only humans can stop pollution  
 B) Only developed countries contribute to pollution  
 C) Pollution can be solved by shutting factories  
 D) Chimneys need to be made more efficient to save earth

## SECTION - II (Long Answer Type-III)

27. 1947 से 2025 तक भारत की विदेश नीति के विकास का विश्लेषण करें।

अथवा

1947 और 2025 के बीच विदेश नीति के विकास और परिवर्तन का विश्लेषण करें। अपने उत्तरों को सुस्पष्ट के लिए छोटे टुकड़े बना सकते हैं।

27. Analyse the evolution of India's foreign policy since 1947 to 2025.

Or

Discuss the historical grievances and ongoing tensions between India and Pakistan. What initiatives have been taken by both nations to resolve their conflicts?

28. 1947 के बाद से, भारत की राजनीति में सामाजिक न्याय का क्या वैश्वीकरण का अर्थ है? इसका क्या महत्व है? इसके विकास करने की आवश्यकता के लिए क्या प्रमाण हैं? उपलब्ध सबूत प्रस्तुत करें।

अथवा

भारत में सामाजिक न्याय का अर्थ क्या है? इसके विकास करने की आवश्यकता के लिए क्या प्रमाण हैं? इसके विकास करने की आवश्यकता के लिए क्या प्रमाण हैं? उपलब्ध सबूत प्रस्तुत करें।

28. Since 1947, social justice has defined the focus of political parties from ideological differences to power sharing arrangements within the spheres of consensus. Explain with examples.

Or

Analyse the impact of identity politics based on caste, religion, region, and language on Indian democracy. Has identity politics strengthened democratic participation or created social divisions?

29. "संयुक्त राष्ट्र का निर्माण आधुनिक दुनिया के सबसे बड़े सैन्य के लिए नहीं, बल्कि उसे एक से बढ़कर से बने के लिए किया गया था।" इसका अर्थ क्या है? इसका अर्थ क्या है?

अथवा

संयुक्त राष्ट्र की स्थापना का अर्थ क्या है? इसका अर्थ क्या है? इसका अर्थ क्या है? इसका अर्थ क्या है?

"The United Nations was not created to take humanity to heaven, but to save it from hell."

Support the statement with relevant examples.

Or

LHI has failed in preventing wars and related miseries, nations prefer its continuation. What makes the LHI a successful organisation?

30. विश्वीकरण और सामाजिक के विकास का अर्थ क्या है? इसके विकास करने की आवश्यकता के लिए क्या प्रमाण हैं? उपलब्ध सबूत प्रस्तुत करें।

अथवा

उत्तर 27 का अर्थ है। संयुक्त राष्ट्र बना हुआ विश्वीकरण (Common but differentiated responsibilities) से क्या अर्थ है?

31. Analyse the factors responsible for the disintegration of the USSR with special reference to Brezhnev and Gorbachev.

Or

What is Agenda 21? What is meant by 'humanity, but differentiated responsibilities'?

## II Pre-Board Examination, 2025-26

Sub : Biology

Class - XII

[ M. M. : 70 ]

Time : 3.00 Hrs. ]

General Instructions:

1. All questions are compulsory.
2. The question paper has five sections and 33 questions.
3. 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 5marks each.
4. There is no overall choice. Answer all 33 questions. However, Internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.
5. Whenever necessary, neat and properly labelled diagrams should be drawn.

### SECTION - A

1. Select the plant species, where emasculation is not required for artificial hybridization experiment.
 

(i) Castor	(ii) Mustard
(iii) Papaya	(iv) Wheat
(v) Lili and iv	(vi) Lili and iv
(c) I, II and III	(d) III, III and IV
  
2. Which of the following is not the function of human placenta?
  - (a) Supply of oxygen and nutrients to the embryo.
  - (b) Production of estrogen
  - (c) removal of carbon dioxide and waste materials from the embryo.
  - (d) Secretion of relaxin hormone

3. Choose the correct statement regarding the ZIFT procedure.
- Ova collected from a female donor are transferred to the Fallopian tube.
  - Zygote is collected from a female donor and transferred to the Fallopian tube.
  - Zygote is collected from a female donor and transferred to the uterus.
  - Ova collected from a female donor and transferred to the uterus.
4. A cross between two tall plants resulted in offspring having few dwarf plants. What would be the Genotypes of both the parents?
- TT and Tt
  - Tt and Tt
  - TT and TT
  - Tt and tt
5. The cause for Klinefelter's syndrome in humans is because of
- An extra copy of autosome.
  - An extra copy of X chromosome.
  - Absence of one X chromosome.
  - Absence of one Y chromosome.
6. A region of coding strand of DNA has the following nucleotide sequence - 5'-ATGCCGC-3'. The sequence of bases on mRNA transcribed by this would be-
- 5'-ATGCCGC-3'
  - 3'-AUGCCGC-5'
  - 5'-3ATGCCG-3'
  - 3'-3ATGCCG-5'
7. What forms the basis of DNA fingerprinting?
- Relative proportions of purines and pyrimidines in DNA.
  - Relative difference in the DNA occurrence in blood, skin and saliva.
  - Relative amount of DNA in ridge and groove of fingerprints.
  - Specific DNA repetitive sequences of DNA that show high degree of polymorphism.
8. The bones of forelimbs of whale, bat, cheetah and hand of man are similar in structure, because
- One organism has given rise to another.
  - They share a common ancestor.
  - They perform the same function.
  - They have biochemical similarities.

9. At which stage during evolution, did humans use hides to protect their bodies and buried their dead?
- Homo habilis
  - Homo erectus
  - Java man
  - Neanderthal man
10. The substance produced by a cell in viral infection that can protect other cells from further infection is
- antibiotic
  - colistin
  - interferon
  - histamine
11. Match the following list of bioactive substances and their roles
- | Bioactive substance | Role                                   |
|---------------------|--|
| A. Oestin           | (i) Removal of oil stain               |
| B. Cytosporin A     | (ii) Removal of clot from blood vessel |
| C. Streptokinase    | (iii) Lowering of blood cholesterol    |
| D. Urease           | (iv) tumour suppressive agent          |
- Choose the correct match.
- A - (ii), B - (iii), C - (i), D - (iv)
  - A - (iv), B - (ii), C - (i), D - (iii)
  - A - (iii), B - (iv), C - (ii), D - (i)
  - A - (ii), B - (iv), C - (i), D - (iii)
12. The trigger for activation of toxin of *Bacillus thuringiensis* is
- acidic pH of stomach
  - high temperature
  - alkaline pH of gut
  - mechanical action in insect gut.
- Question number 13 has General of two statements-Assertion(A) and Reason (R). Answer these questions selecting the appropriate option given below:
- Both (A) and (R) are true and (R) is the correct explanation of (A).
  - Both (A) and (R) are true, but (R) is not the correct explanation of (A).
  - (A) is true, but (R) is false.
  - (A) is false, but (R) is true.

13. Assertion (A): The regions inside the seminiferous tubules contain Leydig cells.  
Reason (R): Leydig cells synthesise and secrete androgens.
14. Assertion (A): Replication and transcription occur in the nucleus but translation occurs in the cytoplasm.  
Reason (R): mRNA is transferred from the nucleus into the cytoplasm where ribosomes and amino acids are available for protein synthesis.
15. Assertion (A): Resistant strains control growth of many insects and arthropods.  
Reason (R): Lethal and DDT/iodine are used as biocontrol agents.
16. Assertion (A): In recombinant DNA technology both ligase and nuclease play an important role.  
Reason (R): Ligase cuts the DNA at specific sites and nuclease joins the DNA fragments.

**SECTION-B**

17. In the TS of a mature anther given below, identify 'a' and 'b' and mention their functions.



**For visually challenged students (in lieu of Q.17)**

The male and female flowers of some plant (species) are well adapted for pollination by wind. Justify.

18. Scurvy in baby girl has been reported to suffer from haemophilia. How is it possible? Explain with the help of a cross.

19. What heterosis is an individual when a regular dose of drug/alcohol is abruptly discontinued? What characteristics observed in the individual under such situation?
20. A- Write how can you clone Drosophila into  
(i) an animal cell (ii) a plant cell  
B- What are transgenic animals? How was the first transgenic cow found to be more useful than the normal cow for humans?
21. Name the type of ecological pyramid that can exist as upright as well as inverted. Explain how does it happen?

**SECTION-C**

22. Draw a labelled diagram of the embryonic stage that gets implanted in the human uterus. State the functions of the two parts labelled by you.  
**For visually challenged students (in lieu of Q.22)**  
Name the stage of human embryo at which it gets implanted. Explain the process of implantation.
23. (a) List any four characteristics of an ideal contraceptive.  
(b) Name two intra-uterine contraceptive devices that affect the quality of sperms.
24. A- (i) How many types of RNA polymerase are there in an eukaryotic cell? Mention which one of them transcribes tRNA.  
(ii) Write the changes the tRNA undergoes before it leaves the nucleus as mRNA.  
B- State the conditions when 'genetic code' is said to be  
(i) degenerate (ii) unambiguous  
(iii) universal.
25. Hardy-Weinberg principle is stated in the following algebraic equation:  
$$p^2 + 2pq + q^2 = 1$$
  
(a) State what do 'p' and 'q' denote in the equation.

- (c) State Hardy-Weinberg principle as indicated in the equation.
- (d) What would you interpret, if the value of 'T' in the equation gets deviated?
26. (a) Name the causative agents of pneumonia and common cold.  
 (b) How do these differ in their symptoms?  
 (c) Mention two symptoms common to both.
27. (a) Name the deficiency for which first clinical gene therapy was given.  
 (b) Mention the causes of and one cure for this deficiency.
28. Name the type of interaction seen in each of the following examples:  
 (a) Acarids worm living in the intestine of humans.  
 (b) Wasps pollinating fig inflorescence.  
 (c) Clown fish living among the tentacles of sea anemone.  
 (d) Mycorrhizae living on the roots of higher plants.  
 (e) Orchids growing on a branch of a mango tree.  
 (f) Disappearance of smaller barnacles when *Salmacis* dominated in the coast of Scotland.

## SECTION - D

Q. No. 29 and 30 are case based questions. Each question has 4 sub-questions with internal choice in one sub-question.

29. Read the following passage and answer the questions that follow:  
 As the ovule transforms into nutlet, the ovary develops into a fruit after fertilisation in angiosperms. These two processes occur simultaneously. The fruits may be fleshy fruits or dry fruits. The fruits may be true fruits or false fruits while some others may be parthenocarpic fruits. Seedless fruits can be induced to develop by the application of auxins and gibberellins.
- (a) Give an example of -  
 (i) a fleshy fruit and (ii) a dry fruit.
- (b) What is common among strawberries, apple and orange, with respect to their fruit.
- (c) What does the ovary and develop into, in a fruit? Name its different regions/parts that can be distinguished in a true fleshy fruit.

Or

- (i) What technical term is given to the development of ovary into a fruit without fertilisation? Give an example. Mention the characteristic feature of such fruits.
30. Read the following passage and answer the questions that follow:  
 In our body, cell growth and differentiation are highly controlled and regulated processes. In the cancerous or neoplastic cells, there is breakdown of these regulatory mechanism leading to uncontrolled proliferation of cells resulting in masses of cells, called tumours. Transformation of normal cells into neoplastic cells is often induced by physical, chemical or biological agents, called carcinogens.
- (a) Name and define one regulatory mechanism that normal cells possess, but is lost in cancer cells.  
 (b) Why are tumor cells dangerous?  
 (c) Name the two types of tumours and write the differences between them.
- Or
- (i) What is metastasis? Why is it fatal.

## SECTION - D

31. Answer (A) or (B)
- (A) A cross was carried out between a pea plant, heterozygous for round and yellow seeds with a pea plant having wrinkled and green seeds.
- (i) Show the cross in a Punnett square.  
 (ii) Write the phenotypes of the progeny of the cross.  
 (iii) What is this cross known as? State the purpose of conducting such a cross.
- (B) Meselson and Stahl carried out an experiment to prove the nature of DNA replication. Recall the experiment and answer the following questions.
- (i) Which two types of nitrogen were used by them in their experiment and why?

(i) Why did they take samples of *E. coli* at definite time intervals for the observation?

(ii) State the role of Calcium chloride density gradient in their experiments.

(iii) Write the conclusion they arrived at.

32. Attempt (A) or (B)

(A) Answer the following questions with respect to recombinant DNA technology.

(i) Why is plasmid considered to be an important tool in rDNA technology? From where can plasmids be isolated? (Any two sources)

(ii) Explain the role of 'cut' and selectable marker in a cloning vector.

(iii) "r-DNA technology can not proceed without restriction endonuclease". Justify.

(B) (i) Name the non-aedes-specific name that infects the roots of tobacco plant and reduces its yield.

(ii) Name the vector that is used to introduce nematode-specific genes in to the host plant (tobacco).

(iii) How do sense and anti-sense RNAs function?

(iv) Why could parasite not survive in a transgenic tobacco plant?

33. Attempt (A) or (B)

(A) (i) What is a trophic level in an ecosystem? What is 'standing crop' with reference to it.

(ii) Why is the length of a food chain in an ecosystem generally limited to 3-4 trophic levels? Explain with an example.

(B) (i) How are 'in situ' and 'ex situ' approaches of biodiversity conservation different from each other?

(ii) Explain the concept of endemism.

(iv) Name three regions in and around our country that are considered biodiversity hotspots.

## II Pre-Board Examination, 2025-26

Sub : Business Studies

Time : 3,00 Hrs. |

Class - XII

| M. M. : 80

## GENERAL INSTRUCTIONS:

1. Question 1 to 20 carries 1 mark each.
2. Questions 21 to 24 carries 3 marks each.
3. Questions from 25 to 30 carries 4 marks each
4. Questions from 31 to 34 carries 6 marks each
5. There is no overall choice. However, an internal choice has been provided in 2 questions of three marks, 1 question of four marks and 2 questions of six marks.

## साधारण निर्देशक:

1. प्रश्न 1 से 20 प्रत्येक में 1 अंक होता है।
2. प्रश्न 21 से 24 प्रत्येक में 3 अंक होते हैं।
3. 25 से 30 तक के प्रश्न 4 अंक के होते हैं।
4. 31 से 34 तक के प्रश्न 6 अंकों के होते हैं।
5. कोई समग्र विकल्प नहीं है। हालांकि, टॉप अंकों के 2 प्रश्नों, चार अंकों के 1 प्रश्न और छह अंकों के 2 प्रश्नों में एक आंतरिक विकल्प प्रदान किया गया है।

Q1) Look at the picture and identify the functions of management.



- |               |             |
|---------------|-------------|
| A) Organising | B) Staffing |
| C) Directing  | D) Planning |





की विवक्षित है।

- (a) A और B दोनों सत्य हैं और C, A की सही व्याख्या है।
- (b) A और B दोनों सत्य हैं लेकिन C, A की सही व्याख्या नहीं है।
- (c) A सत्य है लेकिन B गलत है।
- (d) A गलत है लेकिन B सत्य है।

Q10 \_\_\_\_\_ is a process which begins with a physiological or psychological or deliberate and visible behaviour or a drive.

- (A) Supervision
- (B) Motivation
- (C) Leadership
- (D) Communication

\_\_\_\_\_ एक ऐसी प्रक्रिया है जो एक शारीरिक या मनोवैज्ञानिक या उद्देश्यपूर्ण व्यवहार से शुरू होती है जो व्यवहार या प्रेरणा को प्रेरित करता है।

- (a) प्रशासन
- (b) प्रेरणा
- (c) निगरान
- (d) संचार

Q11 A democratic leader may take his own decision. (True/False)

एक लोकतान्त्रिक नेता अपने निर्णय स्वयं ले सकता है। (सही/गलत)

Q12 Statement 1: The first step in the controlling process is Measurement of Actual Performance. Statement 2: Imposing penalties and restoration level of employees are examples of qualitative standards.

- Choose the option
- (a) Statement 1 is correct and Statement 2 is not correct.
  - (b) Statement 2 is correct and Statement 1 is not correct.
  - (c) Both the Statements 1 and 2 are correct.
  - (d) Both the Statements 1 and 2 are not correct.

ANS: विकल्प (b) सही है।

ANS: वास्तविकता की पहली और प्रथम चरण में वास्तविक प्रदर्शन का मापन है।

Business Studies XII Set II/DR-II

एक विकल्प चुनें।

- (a) बचपन। सही है और बचपन। सही नहीं है।
- (b) बचपन। सही है और बचपन। सही नहीं है।
- (c) बचपन। और। दोनों सही हैं।
- (d) बचपन। और। दोनों सही नहीं हैं।

Q13 Identify the decision which is not taken under financial management.

- (A) Dividend decision
- (B) Capital budgeting decision
- (C) Pricing decision
- (D) Both (A) and (C)

उपरोक्त में से वित्त प्रबंधन के अंतर्गत नहीं लिया गया है।

- (a) लाभांश निर्णय
- (b) पूंजीगत बचत निर्णय
- (c) मूल्य निर्धारण निर्णय
- (d) (a) और (c) दोनों

Q14 \_\_\_\_\_ is about the quantum of finance to be raised from various long term sources.

- (a) Investment decision
- (b) Financing decision
- (c) Dividend decision
- (d) Capital budgeting decision

वित्तित्त निर्णय के बारे में विचार करने वाले विचार को मूल्य के बारे में है।

- (a) निवेश निर्णय
- (b) वित्तपोषण निर्णय
- (c) लाभांश निर्णय
- (d) पूंजीगत बचत निर्णय

Q15 Which of the following statements is not highlighting the importance of financial planning?

- (a) It helps in forecasting what may happen under different business situations.
- (b) It helps in avoiding business shocks and surprises and helps the company in preparing for the future.
- (c) It provides a link between investment and financing decisions on a continuous basis.
- (d) Detailed plans of action prepared under financial planning increases waste, duplication of efforts and gaps in planning.

निष्पत्ति में से कौन सा कथन विशेष निष्पत्ति के महत्व पर प्रकाश नहीं डाल रहा है।

- (a) यह पूर्वगुण कथने में मदद करता है कि विशिष्ट व्यावसायिक निष्पत्तियों के महत्व क्या हो सकते हैं।
- (b) यह व्यावसायिक इच्छा और सख्त वित्तों में मदद करता है और कंपनी को भविष्य की दिशा में ले जाता है।
- (c) यह निराल महत्व पर विशिष्ट और विशेषता निष्पत्तियों के बीच एक कड़ी प्रदान करता है।
- (d) विशिष्ट निष्पत्तियों के महत्व केवल ही नहीं सिद्ध करता धैर्यता से बढ़ती, प्रयासों का उपयोग और विशिष्ट में अंतराल बताते हैं।

Q14 ABC Ltd. has Debt Equity ratio of 3:1 whereas XYZ Ltd. has Debt Equity ratio of 1:1. Assuming the advantage ABC Ltd. will have over XYZ Ltd. when the rate of interest is lower than the rate of return on investment of the company.

- (a) Trading on equity
- (b) Low risk
- (c) Low cost of equity
- (d) Greater flexibility

ABC Ltd. का डेब्ट इक्विटी अनुपात 3:1 है जबकि XYZ Ltd. का डेब्ट इक्विटी अनुपात 1:1 है, XYZ निष्पत्ति में पर ABC निष्पत्ति के लाभ का क्या कारण, जब बाजार की दर कंपनी के पूर्वगुण पर वापस की जा रहे क्या होगी

- (a) इक्विटी पर प्रभाव
- (b) कम जोखिम
- (c) इक्विटी की कम लागत
- (d) अधिक लचीलता

Q17 Match the various Functions of SEBI in Column-I with their respective examples in Column-II

- | Column-I                   | Column-II   |
|----------------------------|---|
| (a) Regulatory function    | (i) To register the brokers, sub-brokers and other persons of the stock market. |
| (b) Developmental function | (ii) To control the insider trading in securities.                              |
| (c) Protective function    | (iii) To impart training to the intermediaries.                                 |
| (d) (i), (ii), (iii)       | (iv) (i), (ii), (iii)   |
| (e) (ii), (iii), (i)       | (v) (ii), (i), (iii)  |

कोलकाता में स्थित 'सेबी' के कर्तव्य का निम्न कौन सा में उल्लेख नहीं करता है।

- | कौलकाता              | कौलकाता   |
|----------------------|---|
| (a) निगरान कर्तव्य   | (i) कोलकाता, एक कोलकाता और कोलकाता के अन्य निष्पत्तियों को प्रोत्साहित करने के लिए। |
| (b) विकास कर्तव्य    | (ii) प्रोत्साहितियों में प्रकाश करने वाले अर्थव्यवस्था को निर्देश करना।             |
| (c) सुरक्षा कर्तव्य  | (iii) निष्पत्तियों को प्रोत्साहित करना।   |
| (d) (i), (ii), (iii) | (iv) (i), (ii), (iii)   |
| (e) (ii), (iii), (i) | (v) (ii), (i), (iii)  |

Q18 Which of the following channel of distribution is suitable when the manufacturer carries a limited product line and has to cover a wide market?

- (a) Direct channel (Zero level channel)
- (b) Manufacturer - Wholesaler - Retailer - Consumer (Two Level Channel)
- (c) Manufacturer - Agent - Wholesaler - Retailer - Consumer (Three level Channel)
- (d) Manufacturer - Retailer - Consumer (One Level Channel)

निम्न का निष्पत्ति में से कौन सा केवल अल्पव्यय है जब निर्माता एक सीमित एक सीमित उत्पाद रखता है और बाजार को कवर करना है।

- (a) सीधे निर्माता - उपभोक्ता (एक स्तर निर्माता)
  - (b) निर्माता - एजेंट - वितरक - उपभोक्ता (तीन स्तर निर्माता)
  - (c) निर्माता - रिटेलर - उपभोक्ता (दो स्तर निर्माता)
  - (d) निर्माता - वितरक - उपभोक्ता (दो स्तर निर्माता)
- Q19 Prabhat Singh opened a jewellery store 'Fashion Jewels' offering western, light jewellery with modern designs for young working women. Good jewellery designs not only made the jewellery attractive for young working women but also gave him a competitive edge in the market. The jewellery was a hit with working women and 'Fashion Jewels' was able to expand.



OR

- 8) और ही बंधन से प्राप्त बंधन का अर्थ बताएं। इस संरचना के किसी दो भाग का स्पष्टता।
- Q23) ABC Ltd issued prospectus for the subscription of its shares for ₹ 500 crores in 2008. The year was oversubscribed by 20 times. The company issued shares to all the applicants on a pro-rata basis. Later SEBI inspected the prospectus and found some misleading statements about the management of the company in it. SEBI imposed a penalty of ₹ 1 crore and barred its three executive directors for dealing in securities market for a year.
- Identify & Explain the function performed by SEBI in the above case.

OR

- 8) Explain Regulatory functions of SEBI.
- 9) राष्ट्रीय विनियम ने 2008 में 500 करोड़ रुपये के लिए अपने शेयरों की अधिप्रति के लिए विनियमित करी की। इस संरचना को 20 गुना ओवरसबस्क्राइब किया गया था। कंपनी ने सभी आवेदकों को अनुसूचित आधार पर शेयर बांट दिए। बाद में सेबी ने प्रोस्पेक्टस का निरीक्षण किया और इसमें कानूनी के प्रमाण के बारे में कुछ प्रश्न उठाए। SEBI ने ₹ 1 करोड़ का जुर्माना लगाया और तीन कार्यकारी निदेशकों को प्रतिबंधित करार में बांधकर अपने के लिए ट्रेडिंग बाजार के लिए प्रतिबंधित का उपरोक्त मामले में वर्षों के लिए बाजार से बाहर कर दिया और भयभीत।

OR

- 8) कर्मों के विवरण कार्य की संरचना को
- Q24) Distinguish between advertising and personal selling in three points)
- Q25) Mega Mart is a large retail company with a central warehouse. The warehouse operations are managed by Mr. Singh, who has been in the job for 20 years. The primary job of the SR

worker is to pick items from shelves, pack them, and prepare them for shipping to various retail stores.

The current process is disorganized. Each worker decides their own path through the warehouse and uses whatever packing materials they can find. As a result, productivity is low, and there are frequent delays in shipments. The workers are often stressed, and disputes over who is responsible for which task are common. Mr. Singh often gives instructions based on his past experience, without any formal analysis of the work.

Identify the principles of management which are being violated in the above context.

मेरा मत है एक केंद्रीय गोदाम के साथ एक बड़ी खुदरा कंपनी है। गोदाम के संरचना का प्रबंधन की विधि इस विषय पर है, जो 20 वर्षों से लंबी है। 50 कर्मियों का प्राथमिक काम भंडारण से बाहर निकालना, उन्हें पैक करना और उन्हें विभिन्न खुदरा दुकानों में विभिन्न के लिए तैयार करना है। वर्तमान प्रक्रिया अकारगर है। जोड़क कार्यकर्ता अपना रास्ता खुद तय करता है। गोदाम के माध्यम से और जो भी पैकिंग सामग्री वे पा सकते हैं उसका उपयोग करते हैं। प्रोडक्ट्स का उपकरण कम होती है, और शिपमेंट में बाधा-बाधा देती होती है। कर्मियों को अक्सर तनाव दिया जाता है, और इस बात पर विवाद कि किस कार्य के लिए कौन जिम्मेदार है, आम बात है। श्री सिंह अक्सर अपने विगत अनुभव के आधार पर निर्देश देते हैं, कि कोई औद्योगिक विश्लेषण के। प्रश्नों के उन विवादों की वृद्धि करीब निम्न उपरोक्त संदर्भ में उत्तरान किया जा रहा है।

- Q26) Molecule Agro Ltd. started a new venture for distribution of harmful and chemical free fertilizers vegetables. They conducted a survey to find out consumer preferences for such vegetables. They found that most of the consumers were concerned about the harmful chemicals being used in growing the vegetables. They found that 90% of the households were searching for its alternatives. The company contacted a group of agriculture experts to lay down the procedure for growing the vegetables by the farmers. They decided to train the farmers in new technology to grow chemical free vegetables according to new innovative methods. The experts also suggested soil management techniques through which farmers would be able to create an abundant and lasting harvest.

Identify and explain the two dimensions of business environment highlighted in the above passage.

सौरव जो जिम्मेदार है प्रतिस्पर्धा और स्वतंत्र दुनिया उद्योग उद्योगों के विस्तार के लिए एक नया उपाय प्रस्तावित किया। उन्होंने लक्ष्य बढ़ाने के लिए उपरोक्त सभी की प्रभावकारिता का पता लगाने के लिए एक सर्वेक्षण शुरू किया। उन्होंने अतिरिक्त उपरोक्त उद्योगों को अपने में शामिल किया ता वह प्रतिस्पर्धाकार बाजारों के बीच में स्थिति में। उन्होंने पता कि 30% वीरवार उनके विकल्पों को लागू कर रहे थे। कंपनी ने विचारों को साकार करने की प्रक्रिया निर्धारित करने के लिए सभी विकल्पों के एक समूह में समीक्षा किया। उन्होंने विकल्पों को एक साथ वे बिक्रम करने का फैसला किया, लक्ष्य में एक प्रारंभिक उद्योगों के अनुसार के विकल्पों को विकल्पों में छोटी स्तरों तक-पैमाने का भी सुझाव दिया जिसके कारण से विकल्प प्रचुर मात्रा में और सफल बनाने में सक्षम होगी।

Q7 (A) State and explain any four importance of Planning.

Or

(B) Read the text given below and answer questions (i-iv) based on it.  
The manager of Jhunjhunwala Big Retail Shop, Mr Prem Karboj fixed the target that in the following year the sales will be boosted from ₹100 crore to ₹200 crore. Also he assured that for the achievement of the target, finance and man-power will be fully arranged. Mr Karboj was still planning for this target when he had to go on a long leave at a sudden. His Deputy Manager, Mr Jash Pandey, now the further activity was taken over by her. The problem before her was how to achieve the sales target fixed by Mr Karboj. For this, she thought of several options. For example, she thought that whether more attention should be given to advertisement, whether the price of the products should be reduced, whether more attention should be paid to packing, whether the quality of goods should be improved, whether the customers should be given better After

Sale Service whether the credit facility for purchase should be given. After deliberating over all the options deeply, she arrived at the conclusion that the target could easily be achieved by concentrating more on advertisement. She did the same. She continuously kept a watch over this whether the desired results were being obtained. At the end of the year the results obtained were favourable. Match the various steps of process of planning with relevant lines quoted here.

Questions :

- (i) "The manager of Jhunjhunwala Big Retail Shop, Mr Prem Karboj fixed the target that in the following year the sales will be boosted from ₹100 crore to ₹200 crore."
- (a) Developing premises (b) Setting objectives  
(c) Follow up (d) Implementing the plan
- (ii) "Also he assured that for the achievement of the target, finance and man-power will be easily arranged."
- (a) Follow up (b) Implementing plan  
(c) Evaluating alternative courses (d) Developing premises
- (iii) "For this she thought of several options."
- (a) Identifying alternative courses of action  
(b) Follow up  
(c) Developing premises  
(d) Setting objectives
- (iv) "She continuously kept a watch over this whether the desired results were being obtained."
- (a) Identifying alternative courses of action  
(b) Follow up  
(c) Developing premises  
(d) Setting objectives

The company was a general manufacturing company known for its high quality furniture. During the last 25 years, the company was expanding rapidly and the demand for this furniture during was rising accordingly. The company was expanding and needed to hire new talent to meet the growing demand. The company began with a few small subsidiaries of operations. The current financial year ended by forming a comprehensive program to create that they brought in the best candidates from the market. The program began with a few small subsidiaries of operations. The current financial year ended by forming a comprehensive program to create that they brought in the best candidates from the market. The program began with a few small subsidiaries of operations. The current financial year ended by forming a comprehensive program to create that they brought in the best candidates from the market.

- 96. The company was a general manufacturing company known for its high quality furniture.
- 97. During the last 25 years, the company was expanding rapidly and the demand for this furniture during was rising accordingly.
- 98. The company was expanding and needed to hire new talent to meet the growing demand.
- 99. The company began with a few small subsidiaries of operations.
- 100. The current financial year ended by forming a comprehensive program to create that they brought in the best candidates from the market.

The company was a general manufacturing company known for its high quality furniture. During the last 25 years, the company was expanding rapidly and the demand for this furniture during was rising accordingly. The company was expanding and needed to hire new talent to meet the growing demand. The company began with a few small subsidiaries of operations. The current financial year ended by forming a comprehensive program to create that they brought in the best candidates from the market. The program began with a few small subsidiaries of operations. The current financial year ended by forming a comprehensive program to create that they brought in the best candidates from the market.





10. The company has been successfully operating a day first electronic business in Singapore for the past five years. The sales officer has decided to invest funds in order to facilitate growth day to day operations of the business. The company has monthly cash flow for the month of March to one of its corporate customers. The sales officer has to consider the following factors in order to decide the investment plan to be implemented for the next year.

- (i) The company has a large cash flow.
- (ii) The company has a high level of liquidity.
- (iii) The company has a high level of profitability.
- (iv) The company has a high level of risk.
- (v) The company has a high level of debt.
- (vi) The company has a high level of equity.
- (vii) The company has a high level of assets.
- (viii) The company has a high level of liabilities.
- (ix) The company has a high level of income.
- (x) The company has a high level of expenses.

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- (v) The company has a high level of equity.
- (vi) The company has a high level of assets.
- (vii) The company has a high level of liabilities.
- (viii) The company has a high level of income.
- (ix) The company has a high level of expenses.
- (x) The company has a high level of cash flow.
- (xi) The company has a high level of sales.
- (xii) The company has a high level of revenue.
- (xiii) The company has a high level of profit.
- (xiv) The company has a high level of loss.
- (xv) The company has a high level of cost.
- (xvi) The company has a high level of price.
- (xvii) The company has a high level of demand.
- (xviii) The company has a high level of supply.
- (xix) The company has a high level of competition.
- (xx) The company has a high level of market.

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## II Pre-Board Examination, 2025-26

Sub : History

Time : 3.00 Hrs. ]

Class - XII

| M. M. : 80

सामान्य निर्देश:-

- (0) सभ्यता चार खंडों में विभाजित है - A, B, C, D और E. प्रश्नपत्र में 34 प्रश्न हैं। सभी प्रश्न अनिवार्य हैं।

(01) खंड A- प्रश्न संख्या 1 से 21 तक बहुविकल्पीय प्रश्न हैं, प्रत्येक 1 अंक का।  
खंड B- प्रश्न संख्या 22 से 27 तक लघु उत्तरीय प्रश्न हैं, प्रत्येक 3 अंक का है। प्रश्न का उत्तर 60 से 80 शब्दों से अधिक नहीं होना चाहिए।

(02) खंड C- प्रश्न संख्या 28 से 30 तक दीर्घ उत्तरीय प्रश्न हैं, प्रत्येक 8 अंक का है। प्रश्न का उत्तर 300 से 350 शब्दों से अधिक नहीं होना चाहिए।

(03) खंड D- प्रश्न संख्या 31 से 33 तक लघु उत्तरीय प्रश्न हैं, जिनमें तीन उत्तर प्रश्न हैं और प्रत्येक 4 अंक का है।

(04) खंड E- प्रश्न संख्या 34 मानविय आधारित है, जिसके 5 अंक हैं, जिसमें मूलतः पूर्ण महत्वपूर्ण तथ्य की परीक्षा और स्वल्प विवरण शामिल है। मानविय को उत्तर सुनिश्चक के साथ संलग्न करें।

(05) प्रश्नपत्र में कोई सामान्य विकल्प नहीं है। हालाँकि, उत्तर प्रती में अनिवार्य विकल्प दिए गए हैं। ऐसे प्रती में से केवल एक ही विकल्प का उत्तर देना है।

(06) कृपया अनिश्चित, खर्ग आश्चर्य से, प्रत्येक खंड और प्रश्न के साथ अनुरोधित निर्देश दिए गए हैं।

## General Instructions:

(I) Question paper is divided into five sections- A, B, C, D and E. There are 34 questions in the question paper. All questions are compulsory.

(II) Section A- Question number 1 to 21 are Multiple choice type questions, each carries 1 mark each.

(III) Section B- Question number 22 to 27 are short answer type questions, carrying 3 marks each. Answer to the question should not exceed 60 to 80 words.

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- (d) Section C- Question number 26 to 30 are long answer type questions. Each marks each answer to the question should not exceed 200 to 250 words.
- (e) Section D- Question number 31 to 33 are source based questions with short questions and each question carries 4 marks.
- (f) Section E- Question number 34 is map based, carrying 3 marks that tests identification and location of significant test items. Attach the map with answer book.
- (g) There is an overall choice in the question paper. However, an internal choice has been provided in the questions. Only one of the choices in each question has to be attempted.
- (h) In addition to this, representative questions are given with each section and category whenever necessary.

REMARKS-A

OVER THE TYPE QUESTIONS

21 x 3 = 63

- 1. Which of the following is not a characteristic of the Harappan civilization?
  - (a) Grid pattern of streets
  - (b) Drainage system
  - (c) Broom made of twigs
  - (d) Use of baked bricks
- 2. Which of the following is not a characteristic of the Harappan civilization?
  - (a) Grid pattern of streets
  - (b) Drainage system
  - (c) Broom made of twigs
  - (d) Use of baked bricks
- 3. Which of the following is not a characteristic of the Harappan civilization?
  - (a) Grid pattern of streets
  - (b) Drainage system
  - (c) Broom made of twigs
  - (d) Use of baked bricks

Which of the above statement is false about the Harappan civilization?

- (a) I only
- (b) II only
- (c) I & II
- (d) III only

- 26. Which of the following is not a characteristic of the Harappan civilization?
  - (a) Grid pattern of streets
  - (b) Drainage system
  - (c) Broom made of twigs
  - (d) Use of baked bricks
- 27. Which of the following is not a characteristic of the Harappan civilization?
  - (a) Grid pattern of streets
  - (b) Drainage system
  - (c) Broom made of twigs
  - (d) Use of baked bricks
- 28. Which of the following is not a characteristic of the Harappan civilization?
  - (a) Grid pattern of streets
  - (b) Drainage system
  - (c) Broom made of twigs
  - (d) Use of baked bricks

Consider the following statements regarding artefact found at the site of Lothal Valley. Choose the correct one.

- (a) The implements were made of stone, metal and bone.
- (b) Some beads were made of shell or coral stones, cemented together, some of stone with gold core.
- (c) The beads were cylindrical - some of them, pyramidal shape.
- (d) Beads were non decorated.

Which of the following statement(s) is/are correct?

- (a) I only
- (b) II only
- (c) I and II
- (d) I and III



- c. A Mesopotamian Coin of copper  
d. Ashoka's first rock inscription at Girnar

ध्यान दें, निम्नलिखित चार विकल्पों में से सही विकल्प चुनें।

सब्रमोचन के स्थान पर।

सब्रमोचन को दान की गई भूमि कहलती है।

- (क) जनाहार (ख) अग्रहार  
(ग) दान (घ) भेट

**NOTE:** The following question is for the visually impaired candidates in lieu of Question number 7.

The land donated to the Brahmins is known as:

- a. Janahar b. Agrahar  
c. Dhan d. Bhett

Q8. निम्नलिखित पाठ्यपुस्तक में किसकी उपस्थिति की चर्चा की है।

- (क) अग्नि (ख) इन्द्र  
(ग) सोम (घ) उपरोक्त में से कोई नहीं

Who were worshipped in Nirgriva Shakti traditions.

- (A) Agni (B) Indra  
(C) Soma (D) None of the above

Q9. 'वेदों के कालीकट इन्द्रमहादेव में होने लगे बड़े पैमाने की कल्पना होने का है नहीं जो चौथे लोग एक स्थिति में है।'

उपरोक्त कथन निम्नलिखित में से किस विकल्पों में सही है।

- (क) अग्नि-विष्णु (ख) इन्द्र-वसुदेव  
(ग) अश्वि-वसुदेव (घ) अग्नि-वसुदेव

"The part of Calicut in Kerala was inhabited by people I had never imagined. These people were a strange country."

The above statement belongs to which of the following foreign travellers?

- (a) Al-Biruni (b) Ibn Battuta  
(c) Abdur Razzaq (d) Marco Polo

10. निम्नलिखित कथन सत्य है कि नहीं।

- i- उपरोक्त कथन आधुनिक इतिहासकारों के मतों में एक है।  
ii- यह कालीकट इन्द्रमहादेव में होने लगे बड़े पैमाने की कल्पना होने का है।  
iii- उपरोक्त कथन अश्वि-वसुदेव के बारे में है।

उपरोक्त कथन निम्नलिखित में से किस विकल्पों में सही है।

- (क) अग्नि-विष्णु (ख) इन्द्र-वसुदेव  
(ग) अश्वि-वसुदेव (घ) अग्नि-वसुदेव

Read the following statement carefully-

- i. He was born in Yavaman of modern Uzbekistan.  
ii. He was a traveller of Persia, Arabia, Sumatra and Syria languages.  
iii. The name of his famous book is Kitab-ul-Hind.

The above statement is related to-

- (a) Al-Biruni (b) Ibn Battuta  
(c) Abdur Razzaq (d) Marco Polo

Q11. निम्नलिखित कथनों पर विचार करें।

- i. अश्वि-वसुदेव के बारे में है।  
ii. अश्वि-वसुदेव के बारे में है।  
iii. अश्वि-वसुदेव के बारे में है।  
iv. अश्वि-वसुदेव के बारे में है।

Consider the following statement-

- i. Ashwini was a famous foreign traveller who was born in...



(i) It gives details of the ways of protection of traders by the state.

(ii) In this a detailed list of trade items is found.

Q16. महान गधी ने खिलाफ अंगरेज का समर्थन क्यों किया?

- (A) बहिष्कार का कारण के विरोध में
- (B) सख्त कानून का विरोध करने के लिए
- (C) शिंदे और मुहम्मदों को एकजुट करने के लिए
- (D) अंगरेजों को जमाने के लिए

Why did Mahatma Gandhi support the Khilafat movement?

- (A) Against the Jallianwalla Bagh incident.
- (B) To oppose the salt law
- (C) To unite Hindus and Muslims.
- (D) To achieve Swaraj

Q17. विद्रोहियों के नेता का विचार बतलिए-

कानपुर : गदगद

अहमद नगर : अहमद

अहमद नगर : अहमद

उपरोक्त में से कौन कौन से युग 1857 के विद्रोह के नेता के साथ जुड़े हैं?

- (A) केवल (A)
- (B) (A) और (B)
- (C) (A) और (C)
- (D) (A) और (D)

Consider the following pairs-

Kanpur : Nana Sahib

Ahmed : Kunwar Singh

Ahmed : Nana Sahib

Which of the above Pairs (A) are correctly matched to their leader of 1857 revolt?

- (A) Only (A)
- (B) Both (A) and (B)
- (C) Both (A) and (C)
- (D) Neither (A) nor (B)

Q18. विद्रोहियों के नेता का विचार बतलिए-

1. 1857 ई. के विद्रोह में अकबरी ने बड़ी भूमिका निभाई।

2. देवरा बखीराम शिंदे ने सख्त कानून को अपने पुत्र के रूप में गढ़ लिया था।

3. 1857 ई. में अहमद नगर के अहमदों के द्वारा विद्रोहियों को अकबरी का अहमदों के पास जमाने का वकालत नहीं दी।

4. 1857 ई. में अहमद शिंदे का एक प्रमुख नेता था।

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

Read the following statements and choose the correct:

- 1. Rammohan played a great role in the revolt of 1857 A.D.
- 2. Dehra Baji Rao II adopted Nana Sahib as his son.
- 3. The British had no answer to the action of the rebels during the months of May and June in 1857 A.D.
- 4. Ahmad was a major centre of revolt in 1857 A.D.

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

Q19. सख्त कानून के बारे में विद्रोहियों में से कौन का विचार सही है?

- (A) इस कानून ने महान गधी को अहमद शिंदे का पुत्र बना दिया।
- (B) यह कानून अकबरी शिंदे को अहमद शिंदे को बड़ी सख्त से पता लगा।
- (C) अहमद शिंदे को यह जमाना करने के लिए सख्त कानून के अहमद शिंदे के लिए नहीं पता लगा।
- (D) अहमद शिंदे का विचार सही है।

Which of the following statements about Salt Satyagrah is/are true?

- (A) This incident drew the attention of the world to Mahatma Gandhi.
- (B) It was the first nationalist activity in which women participated in large numbers.
- (C) It forced the British to realize that their rule would not last forever.
- (D) All the above comments are correct.



It is not very difficult to understand the value of the national movement

Q100. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

Q101. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

Q102. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

Q103. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

Q104. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

Q105. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

It is not very difficult to understand the value of the national movement

Q106. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

Q107. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

Q108. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

Q109. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.

OR

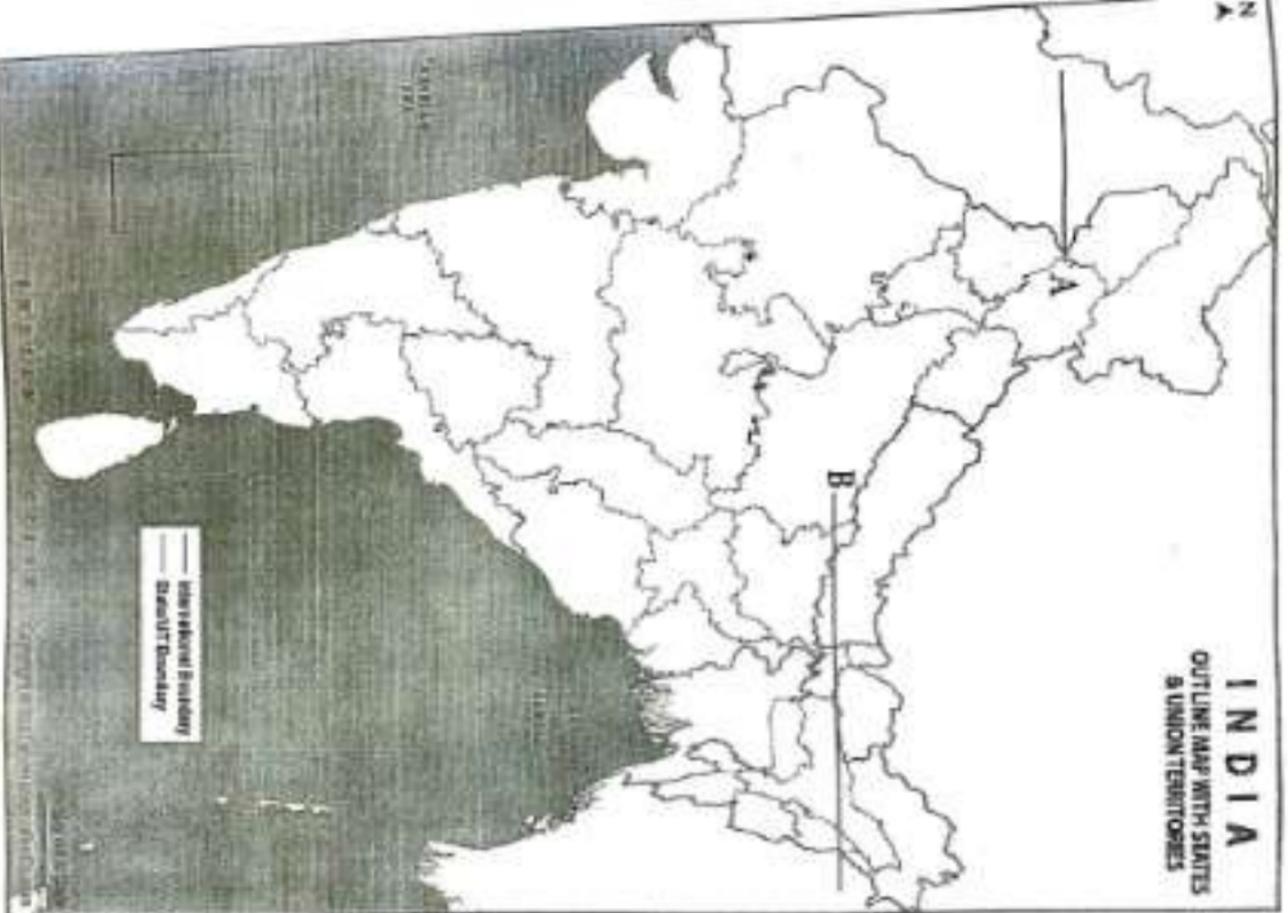
Q110. Explain how the working of the raj was different from the raj of the British.

Ans. The British raj was a more direct form of the British raj. It was a more direct form of the British raj.





**INDIA**  
OUTLINE MAP WITH STATES  
& UNION TERRITORIES



## II Pre-Board Examination, 2025-26

Sub : Computer Science

Class - XII

[ M. M. : 70 ]

Time : 3.00 Hrs. ]

General Instructions :

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

Section A

(21x1=21Marks)

1. State if the following statement is True or False.  
Keys of Dictionary must be of mutable type. 1
  
2. Which line of code will cause an error? 1

<pre>Line1: A={6,2,A[1],6}</pre> <pre>Line 2: print(A[0])</pre> <pre>Line 3: print(A[1][0])</pre> <pre>Line 4:print(A[5])</pre>	<pre>(a) Line 2</pre> <pre>(b) Line 3</pre> <pre>(c) Line4</pre> <pre>(d) Line1</pre>
---	---
  
3. Consider the given expression:  
print(9==11 and 2 or not 5>3) 1





25 Write a function display\_places(PLACES) that takes a dictionary PLACES and prints the names of the places whose names start with the letter 'N', in title case.

```

Example dictionary:
PLACES = {'1': 'Doha', '2': 'London', '3': 'New York', '4': 'Manila', '5': 'Doha'}
Expected output:
New York
Manila

```

OR

Write a function countChars(phrase) that accepts a string phrase and returns a tuple containing the count of characters (excluding spaces) in each word.

```

Example:
Input: "Data science rocks"
Output: (4, 7, 5)
Predict the output of the Python code given below:
students = [
    "Alice", (85, 90),
    "Bob", (75, 80),
    "Charlie", (95, 92),
    "David", (85, 70)
]

```

2

```

passed_students = []
for student in students:
    marks = student['student']
    average = (marks[0] + marks[1]) / 2
    if average > 80:
        if marks[0] > 80:
            passed_students.append(student)

```

2

- 27 A. Write suitable commands to do the following in MySQL.
- I. Show all the records from a table named Employees.
  - II. Delete a database named TestDB.

OR

B. Differentiate between DDL and DML in SQL with a suitable example.

2

- 28 A. Define the following terms:
- I. Protocol
  - II. Firewall

OR

- B. I. Expand the following terms: POP and URL
- II. Differentiate between HTTP and HTTPS.

Section-C

(3 x 3 = 9 Marks)

2

29 A. Write a function in Python to count the number of lines in a text file 'school.txt' which is starting with an alphabet 'x'. (3 x 3 = 9 Marks)

OR

B. Write a function in Python that counts the number of 'Me' or 'My' words present in a text file 'school.txt'.

30 A list containing records of products as  
 l = [ ("Mouse", 700), ("Notebook", 120), ("Monitor", 10000), ("Bag", 800) ]

Write the following user-defined functions to perform operations on a stack named Product.txt:

- I. Push\_element() - Push items with product name longer than 5 characters.  
 Output: [ ("Notebook", 120), ("Monitor", 10000) ]
- II. Pop\_element() - To pop the items from the stack and display them. Also, display "Stack Empty" when there are no elements in the stack.

```

Output:
("Monitor", 10000)
("Notebook", 120)
Stack Empty

```

31 A. Predict the output of the following Python code

```

text = "Go2@Day"
new_text = ""
l = 0
while l < len(text):
    if text[l].lower() in 'aeiou':

```

3

```

new_text += ' '
elif text[0].isalpha():
    new_text += ' ' + text[0]
else:
    new_text += ' '
    i += 1
print(new_text)

```

OR

8. Predict the output of the following Python code

```

park = ['Kanha', 'Valley', 'Hills', 'Forest', 'Meadow']
d = {}
for park in parks:
    for i in range(len(park)-1):
        if park[i] == park[i+1]:
            d.append(park.upper())
            break

```

print(d)

Section-D

(4 x 4 = 16 Marks)

3

32. Consider the table PRODUCTS as given below:

Table: PRODUCTS

productId	name	category	stock	price
P001	Keyboard	Accessories	20	1500
P002	Monitor	Display	15	7000
P003	Mouse	Accessories	50	1000
P004	Printer	Devices	10	12000
P005	Webcam	Devices	12	2500

A. Write the following SQL queries:

- Display total stock per category where stock > 20.
- Display all products sorted by price in ascending order.
- Show distinct category names.
- Display products whose names end with the letter 'r'.

OR

B. Predict the output of the following:

- SELECT \* FROM PRODUCTS WHERE category = 'Accessories';
- SELECT product\_id, name FROM PRODUCTS WHERE name LIKE 'K%';
- SELECT COUNTRY FROM PRODUCTS WHERE category IN ('Device', 'Display');
- SELECT AVG(price) FROM PRODUCTS WHERE category = 'Accessories';

33. Saunabh runs a vehicle rental service. He stores daily rental records in a file named Rentals.csv. The file has the following columns: Vehicle\_ID, Vehicle\_Type, Days\_Rented, Rent\_Per\_Day. Write the following user-defined functions:

- AddRentals(record) - to accept a rental entry and add it to Rentals.csv.
- CalculateTotalRevenue() - to compute total revenue using Days\_Rented and Rent\_Per\_Day for all entries.

4

34. Adhik is managing a Library Database and needs to access certain information from the Books and Borrowings tables for an upcoming survey. Help him extract the required information by writing the appropriate SQL queries as per the tasks mentioned below:

Table Books:

Book_ID	Title	Genre	Published_Year
1	The Architect	Fiction	1906
2	A Brief History of Time	Science	1988
3	The Theory of Everything	Science	2002
4	The Mona Who Sold	Self-help	1997
5	Deep Work	Productivity	2016

Table Borrowings:

Borrow_ID	Book_ID	Member Name	Borrow_Date	Return_Date
1	1	Aashi	2025-09-01	2025-09-07
2	2	Sasha	2025-09-03	2025-09-10
3	3	Maver	2025-09-05	2025-09-15
4	4	Radhika	2025-09-06	2025-09-12
5	5	Aman	2025-09-04	2025-09-09

- I. Display the names of members who borrowed books in the 'Science' genre.
  - II. Display borrowings where the book belongs to 'Productivity', 'Self help', or 'Science' genre.
  - III. Delete all borrowings where the Borrow\_Date is before '2025-09-04'.
  - IV. Display the Cartesian Product of Books and Borrowings.
35. MySQL database named SchoolDB has a student\_records table in MySQL which contains the following attributes:

Column Name	Data Type
Roll_No	Integer
Student_Name	Varchar
Grade	Char(1)
Marks	Integer

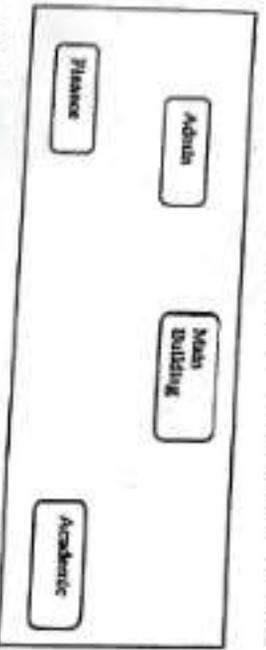
Consider the following details to establish Python-MySQL connectivity:  
 Username: school\_admin  
 Password: admin1234  
 Host: localhost

Write a Python program to update the Marks to 88 for the student whose Roll\_No is 1023 in the student\_records table.

Section-E

(2 x 5 = 10 Marks)

36. Dr. Mehra, a hospital administrator, needs to maintain patient records. Each record should include:
- Patient\_ID (Integer)
  - Name (String)
  - Ward (String)
  - Bill\_Amount (Float)
- Write Python functions to:
- I. Input patient data and append it to a binary file.
  - II. Update the bill amount of patients in the "ICU" ward to 50000.00
37. Himachal Pradesh for operating their day-to-day office & web based activities. They are planning to have network connectivity between four buildings. Answer the question (i) to (iv) after going through the building positions in the campus & other details which are given below:



The distances between various buildings of university are given as:

Building 1	Building 2	Distance(in meters)
Main	Admin	50
Main	Finance	100
Main	Academic	70
Admin	Finance	50
Finance	Academic	70
Admin	Academic	60

Number of computers:-

Building	No. of Computers
Main	150
Admin	75
Finance	50
Academic	60

- I. Suggest the most suitable building to house the server of the network of the university.
- II. Suggest placement for these devices:
  - a) Repeater
  - b) Switch
- III. Suggest cable layout for the efficient connections between the various buildings.
- IV. Which type of cable is most suitable for a high-speed connection among buildings of the university?
- V. A. Explain the importance of Cookies.
  - B. What is meant by network topology?

OR

प्रश्नित पृष्ठों की संख्या : 8

(Set-II)

द्वितीय प्री-बोर्ड परीक्षा, 2025-26

विषय - हिन्दी

समय : 3.00 घण्टे ]

कक्षा : बारहवीं

| पूर्णांक : 80

सामान्य निर्देश :-

निम्नलिखित निर्देशों को बहुत सावधानी से पढ़िए और उनका पालन कीविए :-

- यह प्रश्न पत्र तीन खण्डों में विभाजित है।
- खंड - 'क' में अग्रलिखित बोध पर आधारित प्रश्न पूछे गए हैं। सभी प्रश्नों के उत्तर देना अनिवार्य है।
- खंड - 'ख' में पाठ्यपुस्तक अभिव्यक्ति और माध्यम से प्रश्न पूछे गए हैं। प्रश्नों में अतिरिक्त विकल्प दिए गए हैं।
- खंड - 'ग' में पाठ्यपुस्तक आरोह तथा विज्ञान से प्रश्न पूछे गए हैं। प्रश्नों में आंतरिक विकल्प दिए गए हैं।
- तीनों खंडों के प्रश्नों के उत्तर देना अनिवार्य है।
- पद्यासंभव तीनों खंडों के प्रश्नों के उत्तर क्रमशः लिखिए।

संद - 'क'

प्रश्न 1. शिक्षा किसे राष्ट्र अपना समाज की प्राप्ति का माध्यम है। जो राष्ट्र शिक्षा को मिले। अधिक प्रोत्साहन देता है वह उसका ही विकसित होता है। किसी भी राष्ट्र की शिक्षा नैतिक इस पर निर्भर करती है कि वह राष्ट्र अपने नागरिकों में किस प्रकार की मानसिक अन्तः शैक्षिक कल्पित संज्ञा बाह्य है। इसी नैतिक अनुभव वह अनेक सुधारों और योजनाओं को कार्यान्वित करने का प्रयास करता है जिससे भावी पीढ़ी को देश के अनुभूत कार्यात्मक और वैश्विक रूप से तैयार किया जा सके। आधुनिक शिक्षा का नतीजा हमने देख लिया। हमने उस शिक्षा का नतीजा भी देखा लिया, जिसने विकसित शिक्षण का सबसे महत्वपूर्ण स्थान है, जिसके कारण व्यक्ति को सही भी या किन्तव्य भी मिलने के बजाय दृष्टि नहीं होती। इसका कारण यही है कि शिक्षा के सामाजिक और अवस्थाओं को छोड़कर हमने ऐसे विषयों पर अधिक ध्यान दिया, जो अनुभव का एक दरया विकास करते हैं, जिसके कारण व्यक्तिगत का बड़े से बड़ा भाग अनुभव रह जाता है। बाल्यावस्था में भी कला शिक्षा को अभी तक उचित स्थान नहीं मिला है। जहाँ मिलता भी है, जहाँ बच्चा पढ़ता - पढ़ता वर्ष का होते ही उसके शिक्षण-क्रम में से कला-प्रवृत्तियों को निकाल दिया जाता है।

देखा ही इतने रीढ़ न केना है - हमका अनुभव हमें बताता है कि हर व्यक्ति व्यवहारगत ही उस के बट्ट, किशोर-अवस्था और उसके बट्ट भी धरे जीवन-काल तक किन्हीं - य - किन्हीं कला प्रवृत्तियों को अपने भाव - प्रकटन का तरीका बनाए रख सकता है। आज के सभी विषय विज्ञान पर हम अपनी एकमात्र ध्यान करती हैं जैसे वही, भूगोल,

हिन्दी/बाह्य/Sec-II/DR-II

| कुलपृष्ठ 80

2 Jan 2025  
17/1/25

DR-II

इतिहास, रसायन शास्त्र और यहाँ तक कि साहित्य भी जिस तरह पढ़नी जाती है उस समझी बुद्धिमान व्यक्ति-की ही है। इन पर एक मात्र और देने के कारण कला- प्रयुक्तियों को अपना प्रदान होती है। प्रायःकाल ही कठिनाई-रहित निकल जाती है। वे प्रयुक्तियों केवल पाठ्यक्रम से ही नहीं निकल जाती बल्कि दूर-दक्षिण विषयों को गहन देने के कारण कठिनाई के विना ही भी निकल निकल जाती है। किन्तु अक्सर जो कुछ तरह गहन रहने पर वे जगो का यहीना मरणाण हो रहा है। विद्या प्रदानकी बुद्धि होती या रही है सम्बन्ध रीत- व- रीत देकर होती या रही है अस्वाभाविकता को समझा करना हो रही है। कठिनाई का भाव निकलता ही रहा है। उसका भावना अस्वाभाव है, अधिक सुखी है। अतः ही पूरा नहीं है और बुद्धिमान पर लक्ष करने का उतर खडा है। दूर भगवान् अस्वाभावों को बनाना भाव- विज्ञान समाना दे रहा है। भाव को लक्षित भी नहीं दीद में समा दे रही है।

निम्नलिखित में से निर्देशानुसार विकल्पों का चयन कीजिए :

1. प्रिथ्वी राष्ट्र की उत्पत्ति का आधार होता है

- i. विश्व का विस्तार करना
- ii. उपद्रवित सभी

2. गणतंत्र के आधार पर सर्वोच्च मान देने को मान्यमाना है :

- i. विज्ञान पर
- ii. कला प्रवृत्ति पर

3. दूर गणतंत्र के अनुसार महिला, पुरुषों, बुद्धिमान अर्थात् विद्या है,

- i. शक्तिवन्धन पर
- ii. शक्तवन्धन पर

4. कला को फिर आधार पर माना जा सकता है ?

- i. कला को आधार पर माना जा सकता है ?
- ii. कला को आधार पर माना जा सकता है ?

5. आधुनिक विज्ञान का क्या परिणाम देवता को माना रहा है ?

- i. देवता को माना जा सकता है ?
- ii. देवता को माना जा सकता है ?

6. निम्नलिखित अर्थों का समझने को प्रश्नकर्ता को प्रश्नकर्ता को उत्तर कीजिए :

- i. कला को आधार पर माना जा सकता है ?
- ii. कला को आधार पर माना जा सकता है ?
- iii. कला को आधार पर माना जा सकता है ?
- iv. कला को आधार पर माना जा सकता है ?
- v. कला को आधार पर माना जा सकता है ?
- vi. कला को आधार पर माना जा सकता है ?
- vii. कला को आधार पर माना जा सकता है ?
- viii. कला को आधार पर माना जा सकता है ?

आपकी प्रिय कस्तुरिका किन्तु और से अपना यह है यही-क-समान नहीं बना और गणतंत्र। यद्युक्तों पर गौर शान से उठे जायगा। दूर की नहीं सोच उठान कर मन से उठाना। कठिनाई ना, किन्तु दूर होने का भाव।

अतः करे गणतंत्र, कल की कथा सुनाए।

कला को आधार पर माना जा सकता है ?

- i. कला को आधार पर माना जा सकता है ?
- ii. कला को आधार पर माना जा सकता है ?

3. दूर गणतंत्र के अनुसार महिला, पुरुषों, बुद्धिमान अर्थात् विद्या है,

- i. शक्तिवन्धन पर
- ii. शक्तवन्धन पर

4. कला को फिर आधार पर माना जा सकता है ?

- i. कला को आधार पर माना जा सकता है ?
- ii. कला को आधार पर माना जा सकता है ?

5. आधुनिक विज्ञान का क्या परिणाम देवता को माना रहा है ?

- i. देवता को माना जा सकता है ?
- ii. देवता को माना जा सकता है ?

6. निम्नलिखित अर्थों का समझने को प्रश्नकर्ता को प्रश्नकर्ता को उत्तर कीजिए :

- i. कला को आधार पर माना जा सकता है ?
- ii. कला को आधार पर माना जा सकता है ?
- iii. कला को आधार पर माना जा सकता है ?
- iv. कला को आधार पर माना जा सकता है ?
- v. कला को आधार पर माना जा सकता है ?
- vi. कला को आधार पर माना जा सकता है ?
- vii. कला को आधार पर माना जा सकता है ?
- viii. कला को आधार पर माना जा सकता है ?





प्रश्न 10. निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग 60 शब्दों में दीजिए।

- (क) काशी गंगा घाटी के घाट में लेखक को स्वप्न की बातें आने लगीं याद आ रही थीं।  
 2
- (ख) दण्ड में विद्यार्थी होने के पश्चात् गूटन सिद्ध की बीजना शैली में सब परिवर्तन आ गया था।  
 3
- (ग) विद्विष का पूरा शिष्टीत परिशिष्टियों में भी लिख बना रहता है। विद्विष के पूरा घाट के माध्यम से  
 3
- लेखक क्या संदेश देना चाहता है ?  
 3

प्रश्न 11. निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग 40 शब्दों में दीजिए।

- (क) मनुष्य की जगत्त किन बातों पर निर्भर करती है ? 'नदी बहस्य का अर्थों समस्त' प्रकट  
 के आधार पर उत्तर लिखिए।  
 2
- (ख) 'जागत दर्शन के आधार पर मेरी की जगत्त चरित्र को स्पष्ट कीजिए।'  
 2
- (ग) 'धन विभजन और जगत्त प्रण' घाट के आधार पर स्पष्ट कीजिए कि जगत्त प्रण का अस्तमर्षिक  
 विभाजन करती है।  
 2

प्रश्न 12. निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर किन्हीं दो प्रश्नों के उत्तर लगभग 100 शब्दों में लिखिए।

- (क) 'मोहनकोटरदुं नगर निषोचन की अन्वृती निष्कल है।' 'जगत्त में सबे चौब' घाट के आधार पर  
 स्पष्ट कीजिए।  
 5
- (ख) 'गूटत कदानी के लेखक के जीवन-संघर्ष के उन सिद्धांतों पर प्रकाश डालिए जो हमारे लिए प्रेरणादायक  
 हैं।'  
 5
- (ग) 'वर्मानि काल में धन को परिष्कारिक संस्रो से अधिक महल दिया जा रहा है।' इस कथन को निम्न  
 भेदिए कदानी के आधार पर स्पष्ट कीजिए।  
 5

**II Pre-Board Examination, 2025-26**

Sub. : Economics

Time : 3.00 Hrs. ]

Class - XII

| M. M. : 80

General Instructions / सामान्य निर्देश:

I. इस पत्र का दो भाग हैं।

भाग क. लम्बे उत्तरवाले

भाग ख. संक्षिप्त उत्तरवाले

II. इस पत्र का मैं 1 भाग के 20 बहुविकल्पीय प्रश्न हैं।

III. इस पत्र का मैं 3 भागों के 4 लघु उत्तरवाले प्रश्न हैं, जिनका उत्तर 60 से 80 शब्दों में देना है।

IV. इस पत्र का मैं 4 भागों के 6 लघु उत्तरवाले प्रश्न हैं, जिनका उत्तर 80 से 100 शब्दों में देना है।

V. इस पत्र का मैं 6 भागों के 4 दीर्घ उत्तरवाले प्रश्न हैं, जिनका उत्तर 100 से 150 शब्दों में देना है।

I. This question paper contains two sections:

Section A - Macro Economics

Section B - Indian Economic Development

II. This paper contains 20 Multiple Choice Type Questions of 1 mark each.

III. This paper contains 4 Short Answer Type Questions of 3 marks each to be answered in 60 to 80 words.

IV. This paper contains 6 Short Answer Type Questions of 4 marks each to be answered in 80 to 100 words.

V. This paper contains 4 Long Answer Type Questions of 6 marks each to be answered in 100 to 150 words.

Q.No	SECTION - A (Macro Economics) भाग - क (संक्षिप्त उत्तरवाले)	MARKS
I.	व्यक्तिगत उत्तरों की सामंजस्य सूची भाग 1. लंबे उत्तर वाले प्रश्न भाग 2. लंबे उत्तर वाले प्रश्नों की सूची है। दिए गए प्रश्नों के उत्तर पत्र की नियत सीमा में a) उत्तर 1 का हो और उत्तर 2 आसपास है। b) उत्तर 1 उत्तर है और उत्तर 2 उत्तर है। c) उत्तर 1 और 2 दोनों का है। d) उत्तर 1 और 2 दोनों आसपास है।	1

	<p>Read the following statements carefully. Statement 1: Capital is a stock variable. Statement 2: A stock variable has no time dimension. 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</p>	
2	<p>दो कथन - 1, पढ़कर नीचे दिए गए विकल्पों में सही का चुनिए। a) 1 b) 2 c) 1 और 2 सही हैं d) कथन</p> <p>GNPC = 1 का मान (दिए गए विकल्पों में सही विकल्प चुनिए) a) 0 b) 1 c) 0 और 1 d) सही नहीं</p>	1
3	<p>निम्नलिखित कथन, अर्थशास्त्र (A) और विकास (B) की सही-सही कथन को चुनिए। कथन (A): संपूर्ण और निरंतर विकास को संचालित करने के लिए निरंतर रूप से निवेश करना आवश्यक है। कथन (B): संपूर्ण और निरंतर विकास को संचालित करने के लिए निरंतर निवेश आवश्यक है। a) अर्थशास्त्र (A) और विकास (B) दोनों सही हैं और कथन (C), अर्थशास्त्र (A) की सही व्याख्या है। b) अर्थशास्त्र (A) और विकास (B) दोनों सही हैं और कथन (C), अर्थशास्त्र (A) की सही व्याख्या नहीं है। c) अर्थशास्त्र (A) सही है लेकिन कथन (B) सही नहीं है। d) अर्थशास्त्र (A) सही है लेकिन कथन (B) सही नहीं है।</p> <p>Read the following statement: Assertion (A) and Reason (R). Choose one of the correct alternatives given below: Assertion (A): Foreign capital investment only when the economy is in equilibrium. Reason (R): It is capital intensive, planned savings and planned investment. Alternatives: 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.</p>	1
4	<p>यदि सरकार निर्यात कर बढ़ाएगी, तब निर्यात कर में वृद्धि आएगी है, जो कार्यालय परिसर का विकास प्रोत्साहित करेगी, जिससे सरकार को _____ (अर्थशास्त्र) और विकास (B) को संचालित करने में सहायता मिलेगी। If the government increases its export tax, the export tax will increase, which will help in the development of office premises, thereby helping the government to develop _____ (economy) and development (B), helping the government to develop _____.</p>	1

2	<p>निम्नलिखित कथनों में से सही विकल्प चुनिए। a) सही नहीं है। b) सही है। c) सही नहीं है। d) सही है।</p> <p>In the following statements, the best of the correct alternative is: a) Not correct. b) Correct. c) Not correct. d) Correct.</p>	1
3	<p>निम्नलिखित कथनों में से सही विकल्प चुनिए। a) सही है। b) सही नहीं है। c) सही है। d) सही नहीं है।</p> <p>Revenue receipts of the government include— a) Excise duties and taxes b) Income tax and GST c) Sale of public assets d) Loans to public enterprises.</p>	1
4	<p>निम्नलिखित कथनों में से सही विकल्प चुनिए। a) सही है। b) सही नहीं है। c) सही है। d) सही नहीं है।</p> <p>When planned savings equal planned investment, the economy is in: a) Equilibrium b) Full employment c) Equilibrium d) Depression.</p>	1
5	<p>निम्नलिखित कथनों में से सही विकल्प चुनिए। a) सही है। b) सही नहीं है। c) सही है। d) सही नहीं है।</p> <p>निम्नलिखित कथनों में से सही विकल्प चुनिए। a) सही है। b) सही नहीं है। c) सही है। d) सही नहीं है।</p> <p>If the government budget is _____, it will help in the development of office premises, thereby helping the government to develop _____.</p>	1





From the following data, calculate National Income by Income Method and Dependent Method

Sr.	Items	Rs. In Crores
1	Net domestic capital formation	360
2	Interest	200
3	Rent	200
4	Private final consumption expenditure	1300
5	Government final consumption expenditure	150
6	Net exports	20
7	Net indirect taxes	70
8	Net current transfers from rest of the world	00
9	Consumption of fixed capital	60
10	Net factor income to abroad	50
11	Profits	400
12	Compensation of employees	1200
13	Dividends	100

**SECTION - B (Short Answer Questions)**

**अथ - B (संक्षेप उत्तर के प्रश्न)**

18. निम्न में से सही उत्तर चुनने के लिए उत्तर दीजिए।

- एक ही उत्पादिक प्रक्रिया में दो चरण
- दो चरणों में एक ही उत्पादिक प्रक्रिया
- एक ही उत्पादिक प्रक्रिया में दो चरण
- दो चरणों में एक ही उत्पादिक प्रक्रिया

Which of the following is the main advantage of extending for a company?

- Complete control over all business processes
- Focus on core activities and reduce operational costs
- Minimise the need for skilled employees
- Maintain product quality

19. निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

एक ही उत्पादिक प्रक्रिया में दो चरणों में एक ही उत्पादिक प्रक्रिया

- एक ही उत्पादिक प्रक्रिया
- दो चरणों में एक ही उत्पादिक प्रक्रिया
- एक ही उत्पादिक प्रक्रिया
- दो चरणों में एक ही उत्पादिक प्रक्रिया

Read the following statements carefully and check the correct alternative statement 1 to 4. The job training helps workers in developing their skills. Statement 2: The efficiency of the worker can never be changed.

- Both the statements are true.
- Both the statements are false.
- Statement 1 is true, but statement 2 is false.
- Statement 2 is true, but statement 1 is false.

20. निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

The number of persons who are employed at a particular time are known as \_\_\_\_\_ (व्यवसाय/संसाधन)

(Fill up the blank with correct answer)

21. निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

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निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

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निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

निम्नलिखित में से सही उत्तर चुनने के लिए उत्तर दीजिए।

	<p>Q 10PT : 40% (20 MARKS)</p> <p>Read the following statements carefully.</p> <p>Statement 1: Unemployment is generally a major problem in a highly industrialized country like India.</p> <p>Statement 2: Unemployment is based on a permanent basis and also has social security benefits.</p> <p>In the light of the given statements, choose the correct alternative.</p> <p>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.</p>	
23	<p>किस देश की बेरोजगारी दरें उच्च होती हैं।</p> <p>निम्नलिखित कथनों पर विचार करके सही विकल्प चुनिए।</p> <p>a) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          b) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          c) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          d) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।</p> <p>Which of the following is NOT a characteristic of unorganized labour?</p> <p>a) Low level of education for workers and provision          b) Absence of well building through crop rotation and green manure          c) Concentration of land ownership and seasonal migration          d) Lack of biological pest control methods</p>	1
24	<p>निम्नलिखित कथनों पर विचार करके सही विकल्प चुनिए।</p> <p>a) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          b) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          c) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          d) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।</p> <p>Assertion (A): In the case of unemployment, India's economy has gone into agricultural boom.</p> <p>Reason (R): Industry and infrastructure were almost undeveloped.</p> <p>a) A is true but R is false.          b) A is false but R is true.          c) Both A and R are true and R is the correct explanation of A.          d) Both A and R are true and R is not the correct explanation of A.</p>	1
25	<p>निम्नलिखित कथनों पर विचार करके सही विकल्प चुनिए।</p> <p>a) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          b) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          c) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          d) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।</p> <p>Assertion (A): In the case of unemployment, India's economy has gone into agricultural boom.</p> <p>Reason (R): Industry and infrastructure were almost undeveloped.</p> <p>a) A is true but R is false.          b) A is false but R is true.          c) Both A and R are true and R is the correct explanation of A.          d) Both A and R are true and R is not the correct explanation of A.</p>	1

	<p>There are two statements given below, marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.</p> <p>Assertion (A): Unemployment is generally a major problem in a highly industrialized country like India.</p> <p>Reason (R): Unemployment is based on a permanent basis and also has social security benefits.</p> <p>a) A is true but R is false.          b) A is false but R is true.          c) Both A and R are true and R is the correct explanation of A.          d) Both A and R are true but R is not the correct explanation of A.</p>	
26	<p>निम्नलिखित कथनों पर विचार करके सही विकल्प चुनिए।</p> <p>a) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          b) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          c) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          d) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।</p> <p>Which of the following is NOT a characteristic of unorganized labour?</p> <p>a) Low level of education for workers and provision          b) Absence of well building through crop rotation and green manure          c) Concentration of land ownership and seasonal migration          d) Lack of biological pest control methods</p> <p>Assertion (A): In the case of unemployment, India's economy has gone into agricultural boom.</p> <p>Reason (R): Industry and infrastructure were almost undeveloped.</p> <p>a) A is true but R is false.          b) A is false but R is true.          c) Both A and R are true and R is the correct explanation of A.          d) Both A and R are true and R is not the correct explanation of A.</p>	1
27	<p>निम्नलिखित कथनों पर विचार करके सही विकल्प चुनिए।</p> <p>a) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          b) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          c) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।          d) उच्च औद्योगिक और उच्च उद्योग के विकास के देशों की उच्च बेरोजगारी दरें उच्च होती हैं।</p> <p>Assertion (A): In the case of unemployment, India's economy has gone into agricultural boom.</p> <p>Reason (R): Industry and infrastructure were almost undeveloped.</p> <p>a) A is true but R is false.          b) A is false but R is true.          c) Both A and R are true and R is the correct explanation of A.          d) Both A and R are true and R is not the correct explanation of A.</p>	1





## II Pre-Board Examination, 2025-26

Sub. : Chemistry

[ M. M. : 70

Time : 3.00 Hrs. ]

Class - XII

### GENERAL INSTRUCTIONS:

Read the following instructions carefully.

1. There are 33 questions in this question paper with internal choice.
2. SECTION A consists of 16 multiple-choice questions carrying 1 mark each.
3. SECTION B consists of 5 short answer questions carrying 2 marks each.
4. SECTION C consists of 7 short answer questions carrying 3 marks each.
5. SECTION D consists of 2 case-based questions carrying 4 marks each.
6. SECTION E consists of 1 long answer questions carrying 5 marks each.
7. All questions are compulsory.
8. Use of log tables and calculators is not allowed.

### Section - A

Question 1 to 16 are multiple choice questions. Only one of the choices is correct. Select and write the correct choice as well as the answer to these questions.

1	The half-life period of a first order chemical reaction is 6.93 minutes. The time required for the completion of 99% of the chemical reaction will be ( $\log 2 = 0.3010$ ) A. 45.06 minutes B. 460.6 minutes C. 230.3 minutes D. 23.03 minutes	1
2	Which of the following metal do not form a coloured salt? A. Thorium B. Zinc C. Cobalt D. Iron	1
3.	Which lanthanide ion is more stable in its +2 oxidation state than +3? A. Eu B. La C. Gd D. None of These	1
4	The halo alkane which has the highest dipole moment is A. CH <sub>3</sub> -F B. CH <sub>3</sub> -Cl C. CH <sub>3</sub> -Br D. CH <sub>3</sub> -I	1

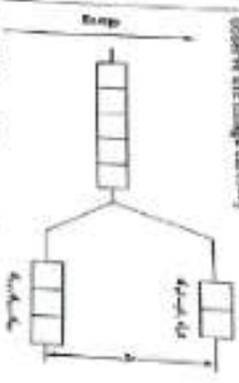
5	Which is the common name of 3-hydroxypropanal? A. Trihydroxyaldehyde B. Vinyl aldehyde C. Allyl aldehyde D. Propylene aldehyde	1
6	What is the general formula for saturated? A. $AC_nH_{2n+2}$ B. $C_nH_{2n+2}$ C. $C_nH_{2n}$ D. $C_nH_{2n-2}$	1
7	Which of the following phenols is most acidic? A. <i>p</i> -Cresol B. <i>m</i> -Cresol C. <i>o</i> -Nitrophenol D. <i>m</i> -Nitrophenol	1
8	The following is an addition product of the reaction between _____ and sodium bisulphite. 	1
9	This ion which acts as a strong inhibitor between Acrylonitrile and Acrylamide? A. Sodium Ions B. Hydrogen Ions C. Benzene Ions D. Ammonium Ions	1
10	Identify the product A in the following reaction: 	1
11	When only two protons are attached to the structure of an alkene, it is classified as _____ alkene.	1

Chemistry XII/Sec-I/EDR-II

12	A primary B. secondary C. aliphatic D. aromatic RNA on hydrolysis does not yield which of the following? A. Amino acid B. Pentose sugar C. Nitrogen base D. Phosphoric acid	1
13	Assertion : On increasing distance, the specific conductance keep on increasing. Reason : On increasing distance, degree of ionization of weak electrolyte increases and mobility of ions also increases. Select the most appropriate answer from the options given below: A. Both A and B are true, and B is the correct explanation of A. B. Both A and B are true, and B is not the correct explanation of A. C. A is true but B is false. D. A is false but B is true	1
14	Assertion : The order of a reaction can be zero or fractional. Reason : We can not determine the order from the balanced chemical equation. Select the most appropriate answer from the options given below: A. Both A and B are true, and B is the correct explanation of A. B. Both A and B are true, and B is not the correct explanation of A. C. A is true but B is false. D. A is false but B is true	1
15	Assertion : Both $[TiCl_2O_2]^{2+}$ and $MnO_4^-$ are colored. Reason: d-d transition is responsible for the color of both the compounds. Select the most appropriate answer from the options given below: A. Both A and B are true, and B is the correct explanation of A. B. Both A and B are true, and B is not the correct explanation of A. C. A is true but B is false. D. A is false but B is true	1
16	Assertion : Oxidation gets enhanced in glyceric acid on reaction with nitric oxidizing agent. The bromine water. Reason : Chlorine contains a halo group. A. Both A and B are true, and B is the correct explanation of A. B. Both A and B are true, and B is not the correct explanation of A. C. A is true but B is false. D. A is false but B is true	1

Chemistry XII/Sec-I/EDR-II

Section - B

Question No. 17 to 21 are very short answer questions carrying 2 marks each.	2
17. Answer either option A or B A. Answer the following: i. In a reaction, if the concentration of reactant A is tripled, the rate of reaction becomes twenty-seven times. What is the order of the reaction? ii. What will be the change in rate of hydrolysis of ester when the amount of the solvent is doubled? Explain.	2 x 1
or B. Answer the following: i. For a reaction $A \rightarrow B \rightarrow \text{Products}$ the rate law is - Rate = $k[A][B]^2$ . Can the reaction be an elementary reaction? Explain. ii. The order and molecularity can and can not be the same for the same reaction. Explain.	2 x 1
18. observe the image carefully 	2 x 1
19. i. What type of geometry will lead to the crystal field splitting in the pattern shown in the figure? ii. Write the electronic configuration after the splitting of d-sub shell in the same pattern as in the figure for both high spin and low spin complexes for a metal having 6 electrons in its d-sub shell. iii. Define Crystal Field Stabilization Energy (CFSE). How it affects the stability of a coordination complex? iv. What is the relation between Crystal field splitting of octahedral and tetrahedral complex?	2 x 1
20. Carry the following conversion i. Ethanol to ethane ii. Ethanol to Salicylic acid	2 x 1
21. Answer the following questions i. Write the product formed during a chemical reaction between formaldehyde and HCN ii. Mention the type of mechanism involved in the above reaction.	2 x 1

Section - C

21. The optical properties of a solution of sugar A changes from dextrorotatory to levorotatory after hydrolysis. Identify the Sugar A. Write down the products obtained after hydrolysis of Sugar A.	2 x 1
22. Question No. 22 to 28 are short answer questions, carrying 3 marks each. A solution is prepared by dissolving 2.46 g of a non-volatile solute in 100 g of water. The boiling point of the solution increases by 0.52°C. Given: $K_b$ (water) = 0.52 K kg mol <sup>-1</sup> . Calculate the molar mass of the solute.	3
23. The standard electrode potentials of the two half-cells are: $E_{\text{oxidation}} = +0.34 \text{ V}$ $E_{\text{reduction}} = -0.76 \text{ V}$ A galvanic cell is constructed as: $\text{Zn(s)}   \text{Zn}^{2+} (0.020 \text{ M})    \text{Cu}^{2+} (0.200 \text{ M})   \text{Cu(s)}$	3
24. Calculate the EMF of the cell at 25°C. For a certain reaction, the rate constant increases from $4.0 \times 10^{-4} \text{ s}^{-1}$ at 298 K to $1.2 \times 10^{-2} \text{ s}^{-1}$ at 323 K. Calculate the activation energy (Ea) of the reaction. $R = 8.314 \text{ J mol}^{-1} \text{ K}^{-1}$	2 x 1.5
25. Complete the reactions: (a) <chem>C1CCCCC1O</chem> $\xrightarrow{\text{SOCl}_2}$ _____ (b) <chem>C1=CC=CC=C1</chem> $\xrightarrow{\text{HBr}}$ _____ Peroxide	3
26. An ether 'X' (C <sub>8</sub> H <sub>18</sub> O) when treated with excess of hot conc. HCl, produced two alkyl halides which on hydrolysis form 'B' and 'C'. Oxidation of 'B' forms an acid 'D', whereas oxidation of 'C' gives a ketone 'E'. Identify A, B and C and reagents involved.	3 x 1
27. A. Name the products formed when: (i) Monocarboxylic acids react with alcohols or phenol in the presence of an acid catalyst. (ii) HCN under poor reduction. B. Arrange the following compounds in increasing order of boiling point: Butanol, phenol, ethane, n-butane, propionic acid, butanal	3 x 1
28. Write down the structures and names of the products formed when D-glucose is treated with:	1

- (i) Hydroxylamine  
(ii) Acetic anhydride  
(iii) Conc.  $\text{HNO}_3$

## Section-D

Question No. 29 & 30 are case-based/data-based questions carrying 4 marks each.

29. Irena is investigating the melting point of different salt solutions. She makes a salt solution using 10ml of water with a known mass of NaCl salt. She puts the salt solution into a freezer and leaves it to freeze. She takes the frozen salt solution out of the freezer and measures the temperature when the frozen salt solution melts. She repeats such experiment.

Exs.	Mass of the salt used in grams	Melting point in $^{\circ}\text{C}$	
		Reading Set 1	Reading Set 2
1	0.1	-1.5	-1.9
2	0.4	-2.5	-3.1
3	0.9	-3.0	-3.3
4	0.8	-3.8	-3.8
5	1.1	-4.1	-4.3
6	1.8	-4.4	-4.3

Assuming the melting point of pure water is  $0^{\circ}\text{C}$ , answer the following questions:

- (i) One temperature in the second set of results does not fit the pattern. Which temperature is that? Justify your answer.  
(ii) Why did Irena collect two sets of results?  
(iii) In place of NaCl, if Irena had used glucose, what would have been the impact on melting point of the solution with same molar concentration of glucose as that of NaCl?

(iii) When is the predicted melting point of 1.2 grams of salt is added to 10 ml of water? Justify your answer.

30. Valence bond theory considers the bonding between metal and the ligands as purely covalent. On the other hand the crystal field theory considers the bond to be ionic purely arising from electrostatic components (the interaction between the metal ion and the ligands). It considers the interaction between the metal ion and the ligands causes the 5 d orbitals to split up. This is called crystal field splitting and the energy difference between the resulting and the ligands crystal field splitting energy. CFSE depends upon the nature of the ligand.

(a) Write the electronic configuration of  $\text{Cr}^{3+}$  on the basis of crystal field theory.

1+1  
+2

- (b) Arrange the following complex ions in the increasing order of crystal field splitting energy  $[\text{Cr}(\text{C}_2\text{O}_4)_3]^{3-}$ ,  $[\text{Cr}(\text{CN})_6]^{3-}$ ,  $[\text{Cr}(\text{NH}_3)_6]^{3+}$ .  
(c) The reason behind the complex of  $\text{Co}^{2+}$  with EDTA $^{4-}$  is more stable compared to the complex of  $\text{Co}^{3+}$  with EDTA $^{4-}$ .

- (d) Write the formula and draw the structure of a complex formed by  $\text{Co}^{2+}$  and EDTA $^{4-}$ .

## Section-E

Question No. 31 to 33 are long answer type questions carrying 5 marks each.

31. Assume either A or B.

A. (i) Why does low spin configuration occur more commonly in 4d and 5d transition metal complexes than in 3d complexes?

(ii) Why does  $\text{Cr}^{2+}$  act as a strong reducing agent, while  $\text{Mn}^{2+}$  acts as a strong oxidising agent?

(iii) Why does Zn react with H $^+$  so easily in its elemental behaviour? Name the specific chemical phenomenon responsible.

(iv) Despite being a d-block element, why is Scandium (Sc) not considered a typical transition element?

(v) Why does the actinoid contraction show a greater decrease in ionic radii compared to the lanthanoid contraction?

OR  
B. (i) Why is  $\text{K}_2\text{Cr}_2\text{O}_7$  a better primary standard than  $\text{K}_2\text{Cr}_2\text{O}_8$  in volumetric analysis?

(ii) Why is  $\text{Mn}^{2+}$  ( $3d^5$ ) more stable than  $\text{Fe}^{2+}$  ( $3d^6$ ) in aqueous solution?

(iii) Which ion among  $\text{Co}^{2+}$  and  $\text{Ni}^{2+}$  is a stronger oxidising agent in acidic medium and why?

(iv) Why do the Cu, Hg not show variable oxidation states like other transition metals?

(v) Why is  $\text{Co}^{3+}$  ( $d^6$ ) more stable than  $\text{Cr}^{3+}$  ( $d^3$ ) in aqueous solution?

OR  
32. Assume either A or B.

A. (i) Write the reactions taking place at cathode and anode in Daniell cell battery when the battery is in use. What happens on charging the battery?

(ii) The standard electrode potentials (E $^{\circ}$ ) for Daniell cell is +1.1 V. Calculate the  $\Delta G^{\circ}$  for the reaction

$\text{Zn}(s) + \text{Cu}^{2+}(aq) \rightarrow \text{Zn}^{2+}(aq) + \text{Cu}(s)$

(E $^{\circ}$  for  $\text{Cu}^{2+}/\text{Cu}$  is +0.34 V and for  $\text{Zn}^{2+}/\text{Zn}$  is -0.76 V)

B. (i) How many g of copper can be produced by the electrolysis of molten  $\text{NiCl}_2$  with a current of 1 ampere for 15 min.

	<p>(ii) State Faraday's Laws of electrolysis?</p> <p>(iii) The molar conductivities at infinite dilution of KCl, KNO<sub>3</sub>, and AgNO<sub>3</sub> at 298 K are:</p> <ul style="list-style-type: none"> <li>• <math>\lambda^{\circ m}(\text{KCl}) = 150.0 \text{ Scm}^2\text{mol}^{-1}</math></li> <li>• <math>\lambda^{\circ m}(\text{KNO}_3) = 145.0 \text{ Scm}^2\text{mol}^{-1}</math></li> <li>• <math>\lambda^{\circ m}(\text{AgNO}_3) = 135.0 \text{ Scm}^2\text{mol}^{-1}</math></li> </ul> <p>Using Kohlrausch's Law, calculate the value of <math>\lambda^{\circ m}(\text{AgCl})</math></p>	+3
33.	<p>A. (a) Write the reactions involved in the following :</p> <p>(i) Hofmannbromamide degradation reaction.  (ii) Diazotisation.  (iii) Gabriel phthalimide synthesis.</p> <p>(b) Give reasons :</p> <p>(i) <math>(\text{CH}_3)_2\text{NH}</math> is more basic than <math>(\text{CH}_3)_3\text{N}</math> in an aqueous solution.  (ii) Aromatic diazonium salts are more stable than aliphatic diazonium salts.</p> <p style="text-align: center;">Or</p> <p>B. (a) Write the structures of main products when benzene diazonium chloride reacts with the following reagents :</p> <p>(i) <math>\text{H}_3\text{PO}_2 + \text{H}_2\text{O}</math>  (ii) <math>\text{CuCN}/\text{KCN}</math>  (iii) <math>\text{H}_2\text{O}</math></p> <p>(b) Arrange the following in the increasing order of their basic character in an aqueous solution :  <math>\text{C}_2\text{H}_5\text{NH}_2, (\text{C}_2\text{H}_5)_2\text{NH}, (\text{C}_2\text{H}_5)_3\text{N}</math></p> <p>(c) Give a chemical test to distinguish between the following pair of compounds :  <math>\text{C}_6\text{H}_5\text{-NH}_2</math> and <math>\text{C}_6\text{H}_5\text{-NH-CH}_3</math></p>	3+2  3+1 +1