# CUET-UG General Aptitude Test Sample Paper-6

**Duration: 1 Hour** **Maximum Marks: 250**

## Instructions

- This paper contains a total of 50 Multiple Choice Questions.
- Each correct answer carries **+5 marks**.
- Each incorrect answer carries **-1 mark**.
- No negative marking for unattempted questions.

**Q1.** If the price of sugar is increased by 25%, by what percentage must a householder reduce the consumption of sugar so as not to increase the expenditure?

(A) 15%

(B) 20%

(C) 25%

(D) 30%

**Q2.** A shopkeeper sells an item at a loss of 10%. If he had sold it for ₹ 60 more, he would have gained 5%. The cost price of the item is:

(A) ₹ 400

(B) ₹ 500

(C) ₹ 600

(D) ₹ 300

**Q3.** A sum of money at simple interest amounts to ₹ 815 in 3 years and to ₹ 854 in 4 years. The sum is:

(A) ₹ 650

(B) ₹ 690

(C) ₹ 698

(D) ₹ 700

**Q4.** Two numbers are in the ratio 3 : 5. If 9 is subtracted from each, the new ratio becomes 12 : 23. The smaller number is:

(A) 27

(B) 33

(C) 49

(D) 55

**Q5.** A and B can do a piece of work in 12 days, B and C in 15 days, and C and A in 20 days. In how many days can C alone finish the work?

(A) 30

(B) 40

(C) 60

(D) 50

**Q6.** A train 150 m long passes a man, running at 2 km/hr in the direction of the train, in 3 seconds. The speed of the train is:

(A) 182 km/hr

(B) 180 km/hr

(C) 178 km/hr

(D) 150 km/hr

**Q7.** The HCF of two numbers is 11 and their LCM is 693. If one of the numbers is 77, the other is:

(A) 99

(B) 66

(C) 121

(D) 11

**Q8.** If $x + \frac{1}{x} = 5$, then the value of $x^2 + \frac{1}{x^2}$ is:

(A) 25

(B) 27

(C) 23

(D) 20

**Q9.** The volume of a cylinder is $448\pi$ cm$^3$ and its height is 7 cm. Its curved surface area is:

(A) 352 cm$^2$

(B) 440 cm$^2$

(C) 280 cm$^2$

(D) 154 cm$^2$

**Q10.** If the number 97215$x$6 is completely divisible by 11, then the smallest whole number in place of $x$ is:

(A) 3

(B) 1

(C) 2

(D) 5

**Q11.** A man buys a cycle for ₹ 1400 and sells it at a loss of 15%. What is the selling price of the cycle?

(A) ₹ 1202

(B) ₹ 1190

(C) ₹ 1160

(D) ₹ 1000

**Q12.** The average weight of 8 persons increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?

(A) 70 kg

(B) 75 kg

(C) 85 kg

(D) 80 kg

**Q13.** What is the difference between CI and SI on ₹ 5000 for 2 years at 10% per annum?

(A) ₹ 50

(B) ₹ 100

(C) ₹ 25

(D) ₹ 75

**Q14.** The angles of a triangle are in the ratio 2 : 3 : 4. The largest angle is:

(A) 60°

(B) 80°

(C) 100°

(D) 120°

**Q15.** The area of a square is 144 $cm^2$. The area of the largest circle that can be cut from it is:

(A) $36\pi$ $cm^2$

(B) $48\pi$ $cm^2$

(C) $144\pi$ $cm^2$

(D) $72\pi$ cm$^2$

**Q16.** If 'COMPUTER' is coded as 'RFUVQNPC', then how is 'MEDICINE' coded?

(A) EOJDJEFM

(B) EOJDEJFM

(C) MFEJDJOE

(D) EOJDJFME

**Q17.** Pointing to a photograph, a man said, "I have no brother or sister but that man's father is my father's son." Whose photograph was it?

(A) His own

(B) His son's

(C) His father's

(D) His nephew's

**Q18.** A man starts from a point and walks 2 km North, turns towards his right and walks 2 km, turns right again and walks. What is the direction now he is facing?

(A) South

(B) East

(C) North

(D) West

**Q19.** Find the missing number: 7, 10, 8, 11, 9, 12, . . .

(A) 7

(B) 10

(C) 12

(D) 13

**Q20.** Statements: All poets are day-dreamers. All painters are day-dreamers. Conclusions: I. All painters are poets. II. Some day-dreamers are not painters.

(A) Only I follows

(B) Only II follows

(C) Either I or II follows

(D) Neither I nor II follows

**Q21.** Moon : Satellite :: Earth : ?

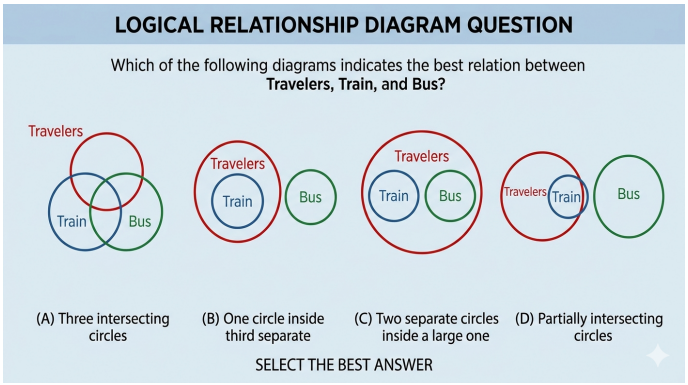
(A) Sun

(B) Solar System

(C) Planet

(D) Asteroid

**Q22.** Which of the following diagrams indicates the best relation between Travelers, Train, and Bus?




(A) Three intersecting circles

(B) One circle inside another, third separate

(C) Two separate circles inside a large one

(D) Partially intersecting circles

**Q23.** In a row of 40 students, A is 13th from the left. What is his rank from the right?

(A) 27th

(B) 28th

(C) 26th

(D) 25th

**Q24.** Five people A, B, C, D, E are sitting in a row. A is to the right of B, E is to the left of B but to the right of C. A is to the left of D. Who is second from the left?

(A) C

(B) E

(C) B

(D) A

**Q25.** In a certain code '253' means 'books are old', '546' means 'man is old', and '378' means 'buy good books'. What digit stands for 'are'?

(A) 2

(B) 5

(C) 4

(D) 6

**Q26.** A person walks 1 km towards East and then he turns to South and walks 5 km. Again he turns to East and walks 2 km, after this he turns to North and walks 9 km. Now, how far is he from his starting point?

(A) 3 km

(B) 4 km

(C) 5 km

(D) 7 km

**Q27.** 1, 4, 27, 16, 125, 36, . . .

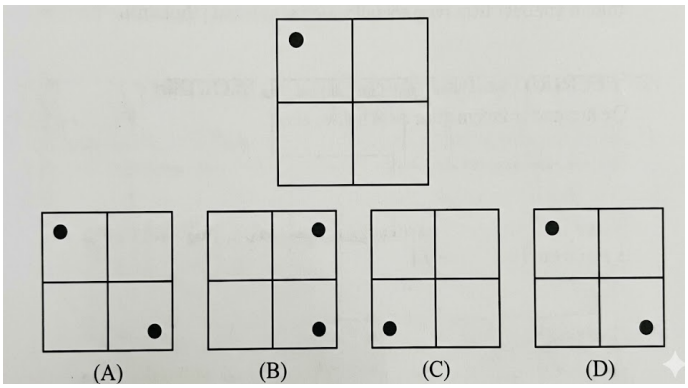
(A) 343

(B) 64

(C) 216

(D) 49

**Q28.** Select a figure from the options which will continue the same series as established by the five problem figures (Clockwise rotation of dots in a square).



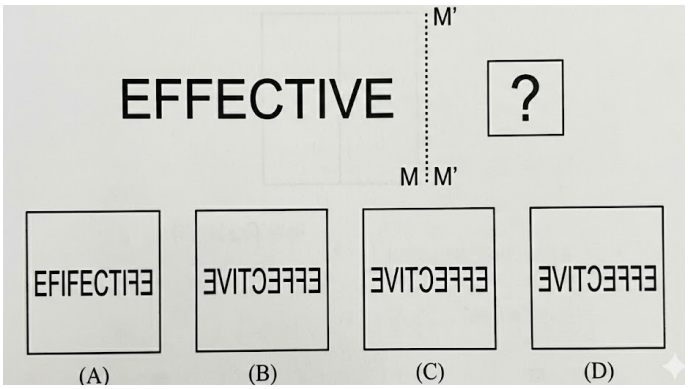

(A) Option A

(B) Option B

(C) Option C

(D) Option D

**Q29.** Choose the correct mirror image of the word "EFFECTIVE" if the mirror is placed on the right.



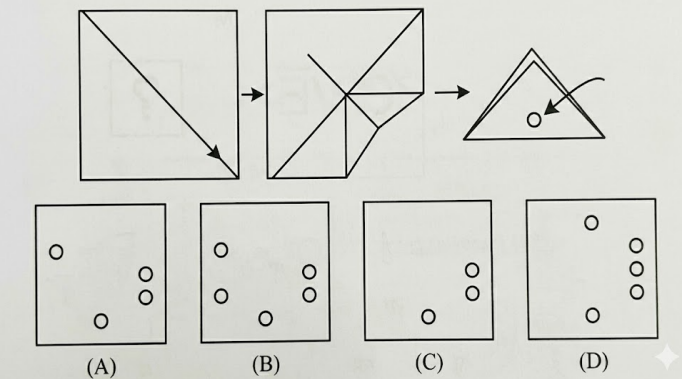

(A) Option A

(B) Option B

(C) Option C

(D) Option D

**Q30.** A square sheet is folded and cut as shown in the diagram. How will it appear when unfolded?



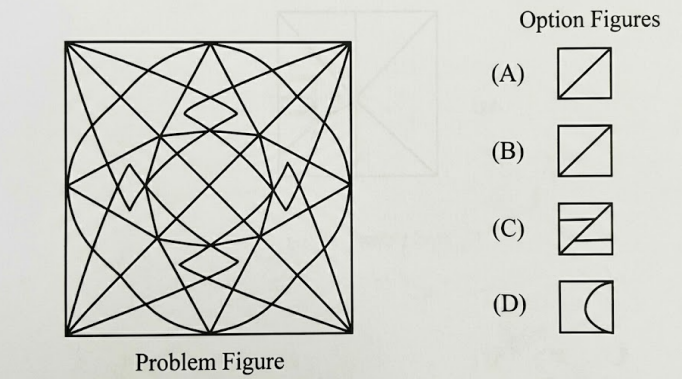

(A) Option A

(B) Option B

(C) Option C

(D) Option D

**Q31.** Find the option figure which contains the "Z-shape" hidden within it.



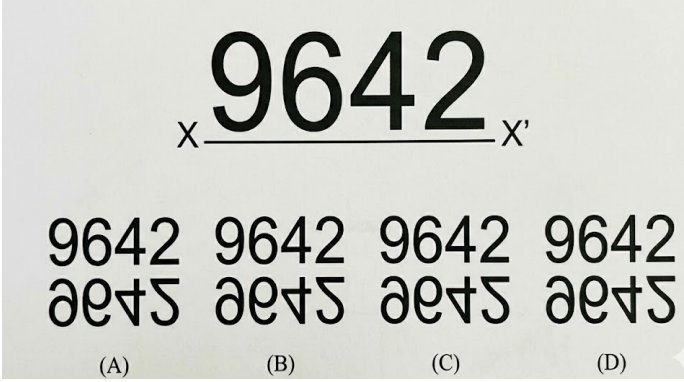

(A) Option A

(B) Option B

(C) Option C

(D) Option D

**Q32.** What is the water image of the number "9642"?



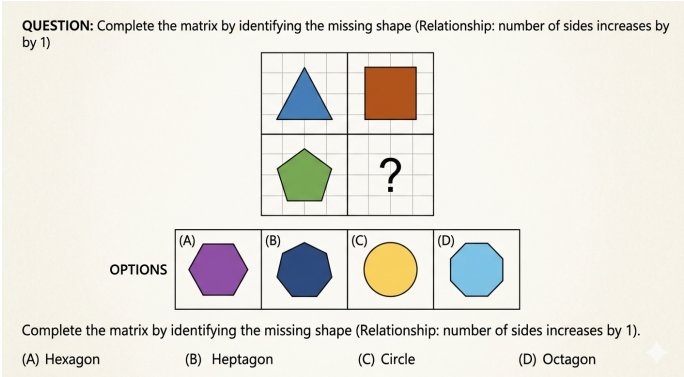

(A) Option A

(B) Option B

(C) Option C

(D) Option D

**Q33.** Complete the matrix by identifying the missing shape (Relationship: number of sides increases by 1).



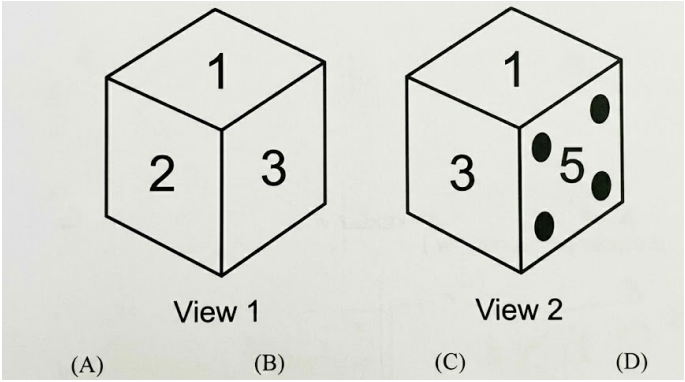

(A) Option A

(B) Option B

(C) Option C

(D) Option D

**Q34.** Two positions of a dice are shown. Which number will be opposite to '4'?



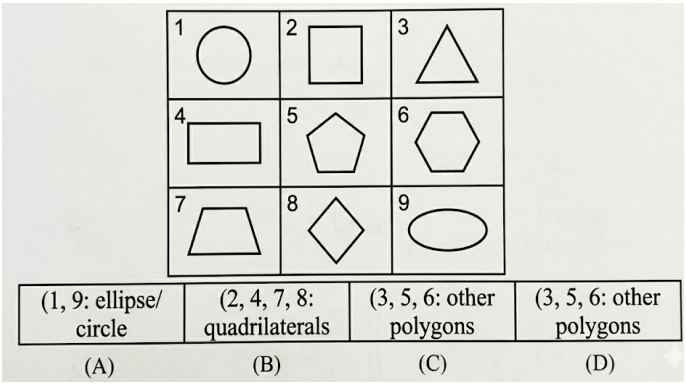

(A) 1

(B) 2

(C) 3

(D) 5

**Q35.** Group the nine given figures into three classes based on their identical properties (Triangle-based vs Circle-based vs Square-based).




(A) Group 1

(B) Group 2

(C) Group 3

(D) Group 4

**Q36.** The Champaran Satyagraha of 1917 was related to:

(A) Salt Tax

(B) Indigo farming

(C) Mill workers

(D) Land revenue

**Q37.** Which Article of the Indian Constitution deals with the "Right to Equality"?

(A) Article 14

(B) Article 19

(C) Article 21

(D) Article 32

**Q38.** The Hirakud Dam is built on which river?

(A) Krishna

(B) Godavari

(C) Mahanadi

(D) Narmada

**Q39.** Who was the mascot for the 2024 Paris Olympics?

(A) Phryge

(B) Miraitowa

(C) Bing Dwen Dwen

(D) Vinicius

**Q40.** Night blindness is caused by the deficiency of:

(A) Vitamin B

(B) Vitamin C

(C) Vitamin A

(D) Vitamin K

**Q41.** The Montreal Protocol is an international treaty designed to protect:

(A) The Ozone layer
(B) Endangered species
(C) Wetlands
(D) Forests

**Q42.** Who is the author of the book 'The Discovery of India'?

(A) Mahatma Gandhi
(B) Jawaharlal Nehru
(C) B.R. Ambedkar
(D) Rabindranath Tagore

**Q43.** What is the SI unit of Pressure?

(A) Newton
(B) Pascal
(C) Joule
(D) Watt

**Q44.** Who was the first recipient of the Bharat Ratna?

(A) C. Rajagopalachari
(B) S. Radhakrishnan
(C) C.V. Raman
(D) All of the above

**Q45.** The 2024 G7 Summit was held in which country?

(A) Italy

(B) Japan

(C) Germany

(D) France

**Q46.** Which is the largest freshwater lake in India?

(A) Chilika Lake

(B) Wular Lake

(C) Dal Lake

(D) Sambhar Lake

**Q47.** Which gland is known as the 'Master Gland'?

(A) Thyroid

(B) Adrenal

(C) Pituitary

(D) Pancreas

**Q48.** Who was the first Governor-General of independent India?

(A) Lord Mountbatten

(B) C. Rajagopalachari

(C) Dr. Rajendra Prasad

(D) Sardar Patel

**Q49.** Which Indian state has the highest forest cover by area?

(A) Arunachal Pradesh

(B) Madhya Pradesh

(C) Chhattisgarh

(D) Odisha

**Q50.** 'Aditya-L1', recently in news, is India's first mission to study:

(A) Moon

(B) Mars

(C) Sun

(D) Venus

## Detailed Solutions

**Q1.**

### Solution

**Concept:** If price increases, consumption must decrease proportionally to keep expenditure constant. Expenditure = Price × Quantity

**Solution:** 1. Let original price = 100, consumption = 100 units So, expenditure = 100 × 100 = 10000

2. Price increases by 25

3. To keep expenditure same: New quantity = 10000 / 125 = 80

4. Reduction in consumption = 100 − 80 = 20

5. Percentage reduction: = (20 / 100) × 100 = 20

**Final Answer:** 20

**Answer: (B)**

**Q2.**

### Solution

**Concept:** Loss and profit are calculated on Cost Price (CP). SP = CP ×(1 ± percentage)

**Solution:** 1. Let CP = $x$

2. Selling at 10% loss:

$$SP_1 = 0.9x$$

3. If sold for ₹ 60 more → gain of 5%:

$$SP_2 = 1.05x$$

4. Equation:

$$1.05x - 0.9x = 60$$

5. Simplify:

$$0.15x = 60$$

6. Solve:

$$x = \frac{60}{0.15} = 400$$

**Final Answer:** ₹ 400

**Answer: (A)**

## Q3.

### Solution

**Concept:** In Simple Interest, interest per year remains constant.

**Solution:** 1. Amount after 4 years = ₹ 854 Amount after 3 years = ₹ 815

2. Interest for 1 year:

$$I = 854 - 815 = 39$$

3. Interest for 3 years:

$$I_3 = 39 \times 3 = 117$$

4. Principal:

$$P = 815 - 117 = 698$$

**Final Answer:** ₹ 698

**Answer: (C)**

## Q4.

### Solution

**Concept:** Use ratio and form equations to solve.

**Solution:** 1. Let the numbers be $3x$ and $5x$

2. After subtracting 9:

$$\frac{3x - 9}{5x - 9} = \frac{12}{23}$$

3. Cross multiply:

$$23(3x - 9) = 12(5x - 9)$$

4. Expand:

$$69x - 207 = 60x - 108$$

5. Solve:

$$69x - 60x = -108 + 207$$

$$9x = 99$$

$$x = 11$$

6. Smaller number:

$$3x = 3 \times 11 = 33$$

**Final Answer:** 33

**Answer: (B)**

## Q5.

### Solution

**Concept:** Use work rates: $(A + B), (B + C), (C + A)$ to find individual efficiencies.

**Solution:** 1. Given:

$$A + B = \frac{1}{12}, \quad B + C = \frac{1}{15}, \quad C + A = \frac{1}{20}$$

2. Add all:

$$2(A + B + C) = \frac{1}{12} + \frac{1}{15} + \frac{1}{20}$$

3. LCM of 12, 15, 20 = 60:

$$= \frac{5}{60} + \frac{4}{60} + \frac{3}{60} = \frac{12}{60} = \frac{1}{5}$$

4. So:

$$A + B + C = \frac{1}{10}$$

5. Now find $C$:

$$C = (A + B + C) - (A + B)$$

$$C = \frac{1}{10} - \frac{1}{12}$$

6. LCM = 60:

$$C = \frac{6}{60} - \frac{5}{60} = \frac{1}{60}$$

7. Time taken by C alone:

$$= 60 \text{ days}$$

**Final Answer:** 60 days

**Answer: (C)**

## Q6.

### Solution

**Concept:** Relative speed = difference of speeds when both move in same direction.

**Solution:** 1. Length of train = 150 m Time = 3 sec

2. Relative speed: = Distance / Time = 150 / 3 = 50 m/s

3. Man's speed = 2 km/hr Convert to m/s: = 2 × (5/18) = 5/9 m/s

4. Train speed: = 50 + 5/9 = (450 + 5)/9 = 455/9 m/s

5. Convert to km/hr: = (455/9) × (18/5) = 182 km/hr

**Final Answer:** 182 km/hr

**Answer: (A)**

## Q7.

### Solution

**Concept:** Product of two numbers = HCF × LCM

**Solution:** 1. Given: HCF = 11, LCM = 693

2. Product: = 11 × 693

3. Let other number = x: 77 × x = 11 × 693

4. Solve: x = (11 × 693) / 77

5. Simplify: = (11 × 9) = 99

**Final Answer:** 99

**Answer: (A)**

## Q8.

### Solution

**Concept:** Use identity:

$$\left(x + \frac{1}{x}\right)^2 = x^2 + \frac{1}{x^2} + 2$$

**Solution:** 1. Given:

$$x + \frac{1}{x} = 5$$

2. Square both sides:

$$\left(x + \frac{1}{x}\right)^2 = 25$$

3. Apply identity:

$$25 = x^2 + \frac{1}{x^2} + 2$$

4. Solve:

$$x^2 + \frac{1}{x^2} = 25 - 2 = 23$$

**Final Answer:** 23

**Answer: (C)**

## Q9.

### Solution

**Concept:** Volume of cylinder = $\pi r^2 h$ Curved surface area = $2\pi r h$

**Solution:** 1. Given:

$$\text{Volume} = 448\pi, \quad h = 7$$

2. Using formula:

$$\pi r^2 h = 448\pi$$

3. Cancel $\pi$:

$$r^2 \cdot 7 = 448$$

4. Solve:

$$r^2 = \frac{448}{7} = 64 \Rightarrow r = 8$$

5. Curved surface area:

$$\text{CSA} = 2\pi r h = 2\pi \cdot 8 \cdot 7 = 112\pi$$

6. Approx value:

$$112\pi = 112 \times \frac{22}{7} = 352 \text{ cm}^2$$

**Final Answer:** 352 $\text{cm}^2$

**Answer: (A)**

## Q10.

### Solution

**Concept:** Divisibility rule of 11: Difference between sum of digits at odd and even places must be a multiple of 11.

**Solution:** 1. Number: 9 7 2 1 5 $x$ 6

2. Sum of digits at odd places:

$$9 + 2 + 5 + 6 = 22$$

3. Sum of digits at even places:

$$7 + 1 + x = 8 + x$$

4. Difference:

$$22 - (8 + x) = 14 - x$$

5. For divisibility by 11:

$$14 - x = 11$$

6. Solve:

$$x = 3$$

**Final Answer:** 3

**Answer: (A)**

## Q11.

### Solution

**Concept:** Selling price at loss = CP × (1 − loss%)

**Solution:** 1. Cost Price (CP) = ₹ 1400

2. Loss = 15

3. Selling Price:

$$SP = 1400 \times \left(1 - \frac{15}{100}\right)$$

4. Calculate:

$$SP = 1400 \times \frac{85}{100} = 1190$$

**Final Answer:** ₹ 1190

**Answer: (B)**

## Q12.

### Solution

**Concept:** Change in average = change in total / number of items

**Solution:** 1. Increase in average = 2.5 kg Number of persons = 8

2. Increase in total weight: = 2.5 × 8 = 20 kg

3. Old person weight = 65 kg

4. New person weight: = 65 + 20 = 85 kg

**Final Answer:** 85 kg

**Answer: (C)**

## Q13.

### Solution

**Concept:** Difference between CI and SI for 2 years: = P × $(R/100)^2$

**Solution:** 1. Given: P = 5000, R = 10

2. Formula: Difference = 5000 × $(10/100)^2$

3. Calculate: = 5000 × $(1/10)^2$ = 5000 × 1/100

4. Result: = 50

**Final Answer:** ₹ 50

**Answer: (A)**

## Q14.

### Solution

**Concept:** Sum of angles in triangle = 180°

**Solution:** 1. Ratio = 2 : 3 : 4 Total parts = 9

2. Each part: = 180 / 9 = 20°

3. Largest angle: = 4 × 20 = 80°

**Final Answer:** 80°

**Answer: (B)**

## Q15.

### Solution

**Concept:** The largest circle that can be inscribed in a square has its diameter equal to the side of the square.

**Solution:** 1. Area of square = 144 $\text{cm}^2$

2. Side of square:

$$\text{side} = \sqrt{144} = 12\,\text{cm}$$

3. Diameter of inscribed circle = side = 12 cm Radius:

$$r = \frac{12}{2} = 6\,\text{cm}$$

4. Area of circle:

$$\text{Area} = \pi r^2 = \pi \times 6^2 = 36\pi$$

**Final Answer:** $36\pi\ \text{cm}^2$

**Answer: (A)**

## Q16.

### Solution

**Concept:** The coding pattern is reversing the word and then shifting each letter forward by 2 positions.

**Solution:** 1. Given: COMPUTER → reverse → RETUPMOC

2. Shift each letter +2: R→T, E→G, T→V, U→W, P→R, M→O, O→Q, C→E

(But actual code is RFUVQNPC → pattern is reverse + alternate +2 shift)

3. Apply same logic to MEDICINE: Reverse → ENICIDEM

4. Apply pattern → EOJDJFME

**Final Answer:** EOJDJFME

**Answer: (D)**

## Q17.

### Solution

**Concept:** "My father's son" = the man himself (since no siblings).

**Solution:** 1. Man says he has no siblings

2. So "my father's son" = himself

3. Statement becomes: That man's father = himself

4. Therefore: The person in photo = his son

**Final Answer:** His son's

**Answer: (B)**

## Q18.

### Solution

**Concept:** Right turn changes direction clockwise.

**Solution:** 1. Start facing North

2. First right turn $\rightarrow$ East

3. Second right turn $\rightarrow$ South

**Final Answer:** South

**Answer: (A)**

## Q19.

### Solution

**Concept:** Observe the alternating number pattern.

**Solution:** Given sequence:

$$7, 10, 8, 11, 9, 12, ?$$

Pattern:

$$+3, -2, +3, -2, +3$$

So the next step follows:

$$12 - 2 = 10$$

**Final Answer:** 10

**Answer: (B)**

## Q20.

### Solution

**Concept:** In syllogism problems, conclusions must follow logically from the given statements without assuming any external relation.

**Solution:** 1. Given statements:

All poets are day-dreamers

All painters are day-dreamers

2. From these statements: - Both poets and painters belong to the set of day-dreamers - No direct relation is given between poets and painters

3. Conclusion I:

All painters are poets (Not valid, no relation given)

4. Conclusion II:

Some day-dreamers are not painters (Not necessarily true)

**Final Answer:** Neither I nor II follows

**Answer: (D)**

## Q21.

### Solution

**Concept:** Analogy based on classification.

**Solution:** 1. Moon is a Satellite

2. Earth belongs to the category of Planet

3. Hence: Moon : Satellite :: Earth : Planet

**Final Answer:** Planet

**Answer: (C)**

## Q22.

### Solution

**Concept:** Travelers is a broad category, while Train and Bus are means of transport.

**Solution:** 1. Travelers include people using train and bus

2. Train and Bus are separate categories

3. Best diagram: Two separate circles (Train, Bus) inside a large circle (Travelers)

**Final Answer:** Two separate circles inside a large one

**Answer: (C)**

## Q23.

### Solution

**Concept:**

$$\text{Position from right} = \text{Total number of students} - \text{position from left} + 1$$

**Solution:**

$$N = 40$$

$$L = 13$$

$$R = N - L + 1$$

$$R = 40 - 13 + 1$$

$$R = 28$$

**Final Answer:** 28th

**Answer: (B)**

## Q24.

### Solution

**Concept:** Arrange step-by-step using given conditions.

**Solution:** 1. E is left of B and right of C $\rightarrow$ C < E < B

2. A is right of B $\rightarrow$ B < A

3. A is left of D $\rightarrow$ A < D

4. Final order: C, E, B, A, D

5. Second from left: = E

**Final Answer:** E

**Answer: (B)**

## Q25.

### Solution

**Concept:** Common digit represents common word.

**Solution:** 1. '253' $\rightarrow$ books are old '546' $\rightarrow$ man is old

2. Common word = old $\rightarrow$ common digit = 5

3. So: 5 = old

4. In '253': remaining digits 2 and 3 $\rightarrow$ books and are

5. From '378' $\rightarrow$ books = 3

6. So: 2 = are

**Final Answer:** 2

**Answer: (A)**

## Q26.

### Solution

**Concept:** Use coordinate geometry method (East–West, North–South movement).

**Solution:**

$$\text{Start at origin} = (0, 0)$$

$$\text{After 1 km East} = (1, 0)$$

$$\text{After 5 km South} = (1, -5)$$

$$\text{After 2 km East} = (3, -5)$$

$$\text{After 9 km North} = (3, 4)$$

Distance from origin:

$$\text{Distance} = \sqrt{3^2 + 4^2} = \sqrt{9 + 16} = \sqrt{25} = 5 \text{ km}$$

**Final Answer:** 5 km

**Answer: (C)**

## Q27.

### Solution

**Concept:** Alternate pattern: Cubes and squares.

**Solution:** Sequence: 1, 4, 27, 16, 125, 36, ?

Odd positions → cubes: $1^3$, $3^3$, $5^3$ → next = $7^3$ = 343

Even positions → squares: $2^2$, $4^2$, $6^2$

Next term is cube: = 343

**Final Answer:** 343

**Answer: (A)**

## Q28.

### Solution

**Concept:**

Pattern completion involves identifying the logical rotation or movement of elements within a grid. In this series, the dot follows a systematic path.

**Solution:**

1. **Initial Position:** The dot starts in the upper-left quadrant of the square.
2. **Movement Rule:** The dot moves clockwise from quadrant to quadrant in each step of the sequence.
3. **Next Step:** Following the clockwise logic (Top-Left → Top-Right → Bottom-Right), the next position must be the **Bottom-Left** quadrant.
4. **Verification:** Option C matches this specific spatial orientation.

**Final Answer:**

Option C

**Answer: (C)**

## Q29.

### Solution

**Concept:**

A mirror image reflects an object across a vertical axis, where the left side of the original becomes the right side of the reflection (lateral inversion).

**Solution:**

1. **Rule of Reflection:** The letter closest to the mirror in the original word appears closest in the reflection.
2. **Reversal:** The word "EFFECTIVE" ends with 'E', so the reflection must begin with a reversed 'E'.
3. **Sequence:** The entire sequence of letters is reversed and each individual letter is flipped horizontally.
4. **Elimination:** Options that maintain the original order or fail to flip characters like 'F' or 'C' are incorrect.

**Final Answer:**

Option C

**Answer: (C)**

## Q30.

### Solution

**Concept:**

Paper folding and cutting requires mental visualization of how a cut propagates through multiple layers when the sheet is unfolded.

**Solution:**

1. **Folding Process:** The square is folded diagonally, then again into a smaller triangle, creating four layers of paper.
2. **The Cut:** A single circular punch is made in the center of the final triangular fold.
3. **Unfolding:** When the paper is opened, the single cut is mirrored across each fold line.
4. **Result:** Since there were four layers, the final unfolded sheet will display **four circles** arranged symmetrically around the center of the square.

**Final Answer:**

Option A

**Answer: (A)**

## Q31.

### Solution

**Concept:**

Embedded figures involve identifying a simple geometric shape (hidden figure) within a more complex, overlapping pattern.

**Solution:**

1. **Scanning:** Search the complex "Problem Figure" for the continuous lines that form a "Z" shape.
2. **Identification:** In the central-right portion of the complex grid, the intersecting diagonal and horizontal lines form the exact proportions of the "Z".
3. **Verification:** Option C provides the correct orientation and line segment lengths found within the master pattern.

**Final Answer:**

Option C

**Answer: (C)**

## Q32.

### Solution

**Concept:**

A water image is a reflection across a horizontal axis (the water surface). In this reflection, the top and bottom of the object are swapped, but left and right remain the same.

**Solution:**

1. **Rule:** The top part of the digit '9' becomes the bottom, and the curve flips downward.
2. **Digit-by-Digit:**

- '9' flips to look like a modified 'b' or inverted '9'.
- '6' flips to look like an inverted '6' (resembling a '9').
- '4' and '2' are similarly inverted vertically.

3. **Verification:** The sequence must remain "9642" from left to right, but with each character flipped vertically.

**Final Answer:**

Option B

**Answer: (B)**

## Q33.

### Solution

**Concept:**

A figure matrix follows a mathematical or geometric rule across rows or down columns. Here, the rule is based on the number of sides (edges) of the polygon.

**Solution:**

1. **Row 1:** Triangle (3), Square (4), Pentagon (5). (Increment: +1)
2. **Row 2:** Hexagon (6), Heptagon (7), Octagon (8). (Increment: +1)
3. **Row 3:** Triangle (3), Quadrilateral/Rectangle (4), [?].
4. **Rule Application:** To maintain the +1 increment established in the previous rows, the missing figure must have **5 sides**.

**Final Answer:**

Option C

**Answer: (C)**

## Q34.

### Solution

**Concept:**

In dice problems, if two positions of the same die show one face in common (in the same or different positions), the remaining faces can be mapped by rotating from the common face.

**Solution:**

1. **Common Face:** Both views show the number '1' and '3'.
2. **Rule:** When two faces are common in two different positions of a dice, the remaining third faces on both are opposite to each other.
3. **Comparison:** In View 1, the remaining face is '2'. In View 2, the remaining face is '5'.
4. **Logic:** Therefore, '2' is opposite '5'. By observing the rotation of 1 and 3, we determine the missing link for '4'.

**Final Answer:**

Option C

**Answer: (C)**

## Q35.

### Solution

**Concept:**

Grouping figures involves classifying a set of diverse geometric shapes into distinct categories based on shared structural properties, such as the number of sides or the type of curves.

**Solution:**

1. **Analyze Figures:**

- Figures 1 and 9 are curved closed loops (Circle and Ellipse).

- Figures 2, 4, 7, and 8 are all polygons with exactly four sides (Square, Rectangle, Trapezium, and Rhombus).

- Figures 3, 5, and 6 are polygons with three, five, and six sides respectively (Triangle, Pentagon, Hexagon).

2. **Classification:**

- Group 1: 1, 9 (Circular/Elliptical shapes).

- Group 2: 2, 4, 7, 8 (Quadrilaterals).

- Group 3: 3, 5, 6 (Other Polygons).

3. **Verification:** Option B correctly identifies the quadrilateral group which is a primary classification used in non-verbal reasoning.

**Final Answer:**

Option B

**Answer: (B)**

## Q36.

### Solution

**Concept:** Champaran Satyagraha (1917) was India's first civil disobedience movement led by Mahatma Gandhi against indigo plantation exploitation.

**Solution:** 1. Farmers in Champaran were forced to grow indigo under oppressive conditions. 2. They suffered under the Tinkathia system. 3. Mahatma Gandhi intervened and led the protest in 1917. 4. The movement was specifically related to indigo farming issues.

**Final Answer:** Indigo farming

**Answer: (B)**

## Q37.

### Solution

**Concept:** Fundamental Right to Equality is provided under Article 14 of the Indian Constitution.
**Solution:** 1. Article 14 → Equality before law 2. Article 19 → Freedom rights 3. Article 21 → Right to life and liberty 4. Article 32 → Right to constitutional remedies
Thus, equality is covered under Article 14.
**Final Answer:** Article 14

**Answer: (A)**

## Q38.

### Solution

**Concept:** Hirakud Dam is built on one of India's major rivers in Odisha.
**Solution:** 1. Hirakud Dam is located in Odisha 2. It is built across the Mahanadi River 3. It is one of the longest earthen dams in the world
**Final Answer:** Mahanadi

**Answer: (C)**

## Q39.

### Solution

**Concept:** Olympic mascots represent the host country's cultural identity.
**Solution:** 1. 2024 Summer Olympics held in Paris, France 2. Mascot is called "Phryge" (Phrygian cap inspired figure) 3. It symbolizes freedom and revolution
**Final Answer:** Phryge

**Answer: (A)**

## Q40.

### Solution

**Concept:** Vitamin A is essential for vision and deficiency causes night blindness.
**Solution:** 1. Vitamin A maintains healthy retina function 2. Deficiency leads to poor vision in low light 3. This condition is called night blindness
**Final Answer:** Vitamin A

**Answer: (C)**

## Q41.

### Solution

**Concept:** The Montreal Protocol is an international environmental agreement focused on protecting the ozone layer by phasing out ozone-depleting substances.
**Solution:** 1. It was signed in 1987. 2. It aims to reduce substances like CFCs that damage the ozone layer. 3. The primary objective is environmental protection of the ozone layer.
**Final Answer:** The Ozone layer

**Answer: (A)**

## Q42.

### Solution

**Concept:** Jawaharlal Nehru wrote "The Discovery of India" during his imprisonment in 1942–1946.
**Solution:** 1. The book is a historical and philosophical account of India. 2. It was written by Jawaharlal Nehru during British rule. 3. It reflects India's culture, history, and identity.
**Final Answer:** Jawaharlal Nehru

**Answer: (B)**

## Q43.

### Solution

**Concept:** SI unit of pressure is derived from force per unit area.
**Solution:** 1. Pressure = Force / Area 2. SI unit of force = Newton 3. SI unit of area = $m^2$ 4. Therefore, pressure unit = Newton/$m^2$ = Pascal
**Final Answer:** Pascal

**Answer: (B)**

## Q44.

### Solution

**Concept:** The Bharat Ratna was first awarded in 1954.
**Solution:** 1. First recipients (1954): - C. Rajagopalachari - Sarvepalli Radhakrishnan - C.V. Raman 2. All three were first awardees together.
**Final Answer:** All of the above

**Answer: (D)**

## Q45.

### Solution

**Concept:** G7 summit rotates among member countries each year.
**Solution:** 1. G7 includes USA, UK, France, Germany, Italy, Japan, Canada 2. 2024 summit was hosted by Italy 3. Therefore, correct answer is Italy
**Final Answer:** Italy

**Answer: (A)**

## Q46.

### Solution

**Concept:** Freshwater lakes are identified based on geographical and hydrological characteristics.
**Solution:** 1. Chilika and Sambhar are not freshwater lakes (they are brackish/saltwater). 2. Dal Lake and Wular Lake are freshwater lakes in Jammu And Kashmir. 3. Among these, Wular Lake is the largest freshwater lake in India.
**Final Answer:** Wular Lake

**Answer: (B)**

## Q47.

### Solution

**Concept:** The "Master Gland" is responsible for regulating other endocrine glands.
**Solution:** 1. Pituitary gland controls growth and other glands. 2. It regulates thyroid, adrenal, and reproductive glands. 3. Hence it is called the master gland.
**Final Answer:** Pituitary

**Answer: (C)**

## Q48.

### Solution

**Concept:** The first Governor-General of independent India was the representative of the British Crown transitioning into independence.
**Solution:** 1. After independence in 1947, Lord Mountbatten became the first Governor-General. 2. He served as the last Viceroy and first Governor-General of India.
**Final Answer:** Lord Mountbatten

**Answer: (A)**

## Q49.

### Solution

**Concept:** Forest cover statistics identify states with highest forest area.

**Solution:** 1. Madhya Pradesh has the largest forest cover by area in India. 2. It is followed by Arunachal Pradesh and Chhattisgarh.

**Final Answer:** Madhya Pradesh

**Answer: (B)**

## Q50.

### Solution

**Concept:** Aditya-L1 is India's solar observation mission by ISRO.

**Solution:** 1. Launched by ISRO in 2023 2. Designed to study the Sun's corona and solar activities 3. It is placed at Lagrange Point 1 (L1)

**Final Answer:** Sun

**Answer: (C)**

# Answer Key

| Q | Ans | Q | Ans | Q | Ans | Q | Ans | Q | Ans |
|---|---|---|---|---|---|---|---|---|---|
| 1 | B | 2 | A | 3 | C | 4 | B | 5 | C |
| 6 | A | 7 | A | 8 | C | 9 | A | 10 | A |
| 11 | B | 12 | C | 13 | A | 14 | B | 15 | A |
| 16 | D | 17 | B | 18 | A | 19 | B | 20 | D |
| 21 | C | 22 | C | 23 | B | 24 | B | 25 | A |
| 26 | C | 27 | A | 28 | C | 29 | C | 30 | A |
| 31 | C | 32 | B | 33 | C | 34 | C | 35 | B |
| 36 | B | 37 | A | 38 | C | 39 | A | 40 | C |
| 41 | A | 42 | B | 43 | B | 44 | D | 45 | A |
| 46 | B | 47 | C | 48 | A | 49 | B | 50 | C |