



SAMPLE PAPER



National
Admission Test



Vidyamandir
Intellect Quest



VMC International
Incentive Test

FOR STUDENTS CURRENTLY IN CLASS

6TH

6 YEAR PROGRAM

PRE-FOUNDATION

WHY VMC ?

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Vidyamandir Intellect Quest | 6 Year

Duration: 3.0 Hrs.

Maximum Marks: 350

SAMPLE PAPER

For Students going to class VII in April' 2022 (Stream: Pre-Foundation)

PAPER SCHEME:

- The paper contains **60 Objective Type Questions** divided into three sections: **Section - I, Section - II and Section - III.**
- Section I** contains **10 Multiple Choice Questions (1-10)** based on **Mental Aptitude**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE CHOICE is correct.**
- Section II** contains **35 Multiple Choice Questions (11-45)** based on **Mathematics**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE CHOICE is correct.**
- Section III** contains **15 Multiple Choice Questions (46-60)** based on **Science**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE CHOICE is correct.**

MARKING SCHEME:

- Section I** : For each question, **5 marks** will be awarded for correct answer and **-1 negative marking** for incorrect answer.
- Section II & III** : For each question, **6 marks** will be awarded for correct answer and **-1 negative marking** for incorrect answer.

GENERAL INSTRUCTIONS:

- For answering a question, an **ANSWER SHEET (OMR SHEET)** is provided separately. Please fill your **Name, Roll Number, Seat ID, Date of Birth** and the **PAPER CODE** properly in the space provided in the **ANSWER SHEET**. IT IS YOUR OWN RESPONSIBILITY TO FILL THE OMR SHEET CORRECTLY.
 - A blank space has been provided on each page for rough work.
 - Violating the examination room discipline will immediately lead to the cancellation of your paper and no excuses will be entertained.
 - No one will be permitted to leave the examination hall before the end of the test.
- Please submit both the question paper and the answer sheet to the invigilator before leaving the examination hall.**

FILL THE FOLLOWING INFORMATION PROPERLY BEFORE YOU PROCEED

NAME		SEAT ID	
ROLL NUMBER		ROOM NO.	
INVIGILATOR'S SIGNATURE		OMR BAR CODE	

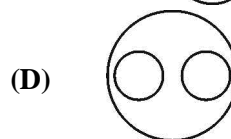
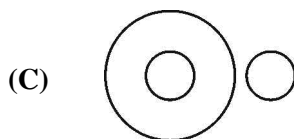
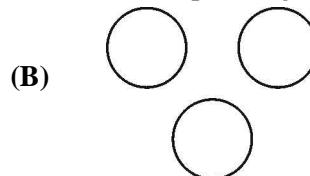
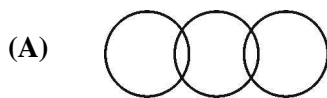
SUGGESTIONS:

- Before starting the paper, spend 2-3 minutes to check whether all the pages are in order and report any issue to the invigilator immediately.
- Try to attempt the Sections in their respective order.
- Do not get stuck on a particular question for more than 3-4 minutes. Move on to a new question as there are 60 questions to solve.

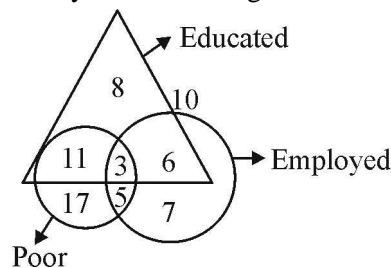
SECTION - I [MENTAL APTITUDE]**Directions for questions 1-2**

In this question, there are four terms in each question. The terms right to symbol:: have same relationship as the term of the left to symbol ::. Out of the four, one term is missing which is one of the four alternatives given below. Find out the correct alternatives.

- UVST : WTUR :: ? : RILO
 (A) P K J Q (B) T S U V (C) U V T S (D) T S V U
- Race : Fatigue :: Fast : ?
 (A) Food (B) Appetite (C) Hunger (D) Weakness
- In a class of 43 students. Sarita is at 27th position from the top. What is her rank from the other side?
 (A) 16th (B) 17th (C) 15th (D) 21th
- Six persons are sitting in a circle. 'J' is between 'N' and 'O'; 'N' is opposite 'M'; and 'L' is not in either of the neighbouring seats of 'N'. Who is opposite to 'K'?
 (A) M (B) O (C) J (D) L
- Which one of the following diagrams best depicts the relationship among Mammals, Cows and Crows?



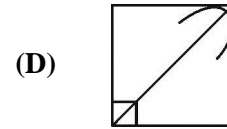
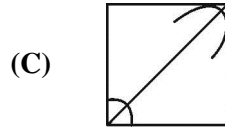
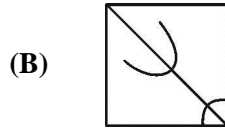
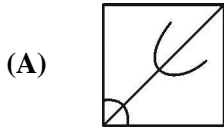
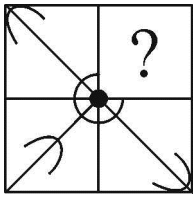
- The figure represents three classes of youth in a village. How many educated youth is poor?



- (A) 14 (B) 9 (C) 6 (D) 19

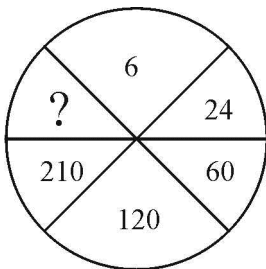
Directions for question-7

7. Which answer figure completes the pattern given in the question figure?

**Directions for question-8**

In the following question, select the missing number front the given responses

- 8.



- (A) 330 (B) 336 (C) 428 (D) 420

9. If the first three letters of the word COMPREHENSION are reversed, then the last three letters are added and then the remaining letters are reversed and added, then which letter will be exactly in the middle?

- (A) H (B) N (C) R (D) S

Directions for question-10

In the following questions, a group of letters is given which are numbered 1, 2, 3, 4, 5 and 6. Below are given four alternatives containing combinations of these numbers. Select that combination of numbers so that letters arranged accordingly form a meaningful word.

10. I P E L O C

1 2 3 4 5 6

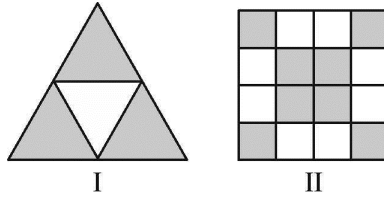
- (A) 1, 4, 3, 5, 2, 6 (B) 2, 5, 4, 1, 6, 3
(C) 3, 4, 5, 1, 2, 6 (D) 4, 5, 1, 2, 3, 6

SECTION - II [MATHEMATICS]

11. Out of 30 students in a class, 6 like football, 12 like cricket and remaining like tennis. The ratio of number of students who like tennis to the total number of students is:
(A) 2 : 3 (B) 5 : 1 (C) 2 : 5 (D) 5 : 2
12. The price of a table and a chair are in the ratio 7 : 5. If a table costs Rs. 480 more than the chair, then the price of the chair is:
(A) Rs. 600 (B) Rs. 1000 (C) Rs. 1200 (D) Rs. 1800
13. If the cost of 4 dozen bananas is Rs. 60. Then number of bananas purchased for Rs. 12.5 will be:
(A) 12 (B) 18 (C) 10 (D) 14

14. Find the number of envelopes that can be made out of a sheet of paper 384 cm by 172 cm, if each envelope requires a piece of paper of size 16 cm by 12 cm.
 (A) 340 (B) 344 (C) 338 (D) 342
15. Niharika walks thrice around a square field of side 22 m. Girish walks twice around a rectangular field of length 10 m and breadth 12 m. Who covers more distance and by how much?
 (A) Girish, 20 m (B) Niharika, 200 m
 (C) Girish, 176 m (D) Niharika, 176 m
16. Latika wants to put a border around her bedsheet of length 10 m and breadth 5 m 60 cm. Find the total cost of the border required at the rate of Rs. 90 per metre.
 (A) Rs. 2808 (B) Rs. 2505 (C) Rs. 2408 (D) Rs. 2605
17. The equation for the statement 'Half of a number added to 10 is 15' is:
 (A) $\frac{x}{2} = 10 + 5$ (B) $\frac{x}{2} + 10 = 15$ (C) $\frac{x}{2} + 15 = 10$ (D) $\frac{x}{2} = 10 + 15$
18. If twelve less than 3 times of a number is 27, then the number is:
 (A) 29 (B) 39 (C) 65 (D) 13
19. If $\frac{2}{3}p - 2\frac{1}{2} = 3\frac{1}{2}$, then the value of p is:
 (A) -9 (B) 6 (C) 9 (D) 0
20. The breadth of a rectangles is w cm and the length is 5 times as long as its breadth. What is the perimeter of the rectangle?
 (A) $5w$ cm (B) $12w$ cm (C) $(10 + 2w)$ cm (D) $(25 + w)$ cm
21. The algebraic expression for the statement "Product of x and reciprocal of a is subtracted from the product of y and reciprocal of b " is:
 (A) $\frac{y}{b} - \frac{x}{a}$ (B) $\frac{y-x}{a-b}$ (C) $xa - yb$ (D) $\frac{1}{yb - xa}$
22. If $p : q :: r : s$, then the correct statement is:
 (A) $qr = ps$ (B) $pqr = s$ (C) $qrs = p$ (D) $pq = rs$
23. If \square persons : 10 persons = 7000 paise : Rs. 100, then \square means _____.
 (A) 5 (B) 6 (C) 7 (D) 8
24. If side of a square is doubled, then the new perimeter is _____ times the original perimeter.
 (A) 2 (B) $\frac{1}{4}$ (C) 9 (D) 4
25. If the area of a square is numerically equal to the perimeter of the square, then the side of square is:
 (A) 2 units (B) 3 units (C) 4 units (D) 5 units

26. What is the sum of the shaded parts of the given figures?



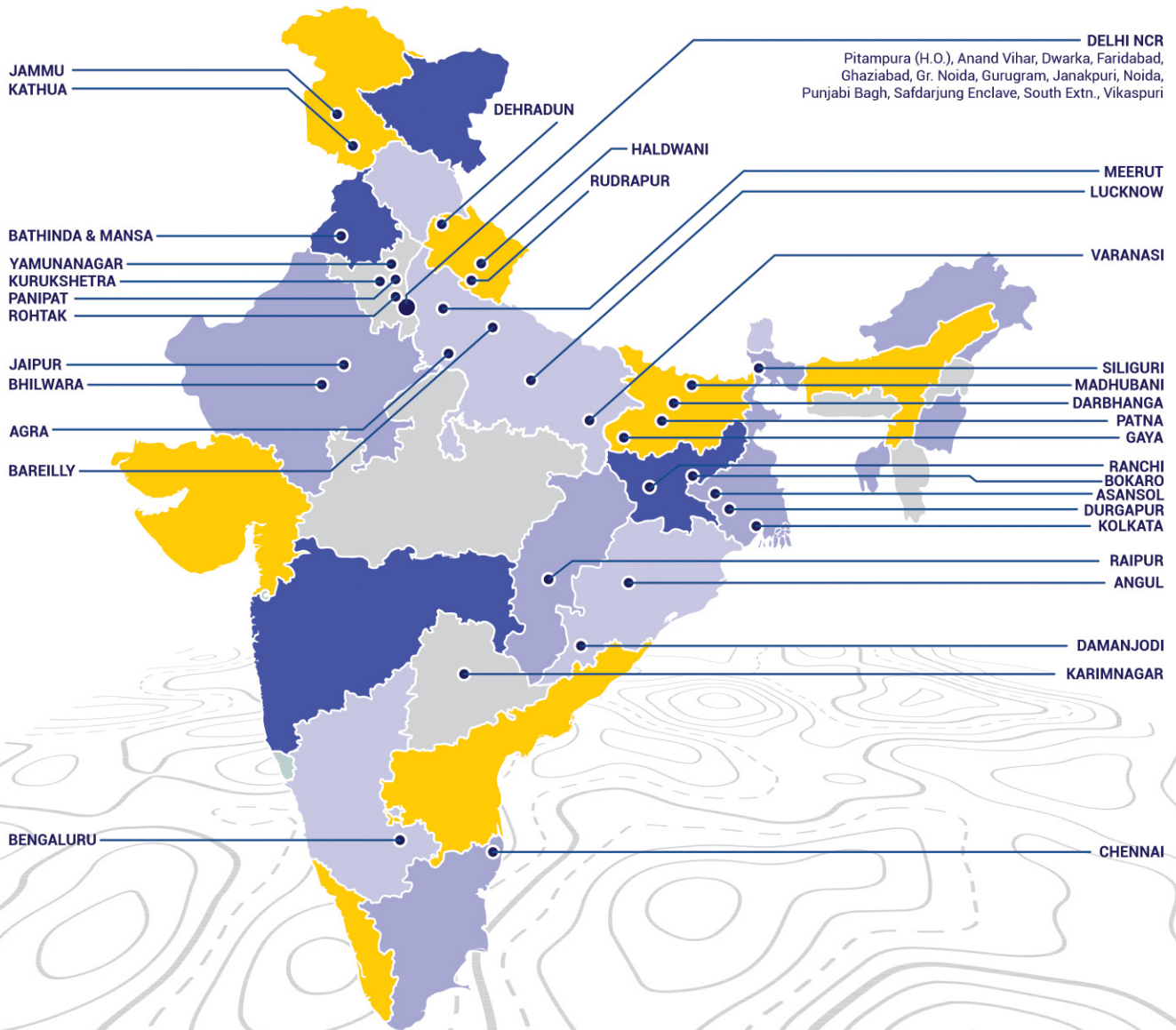
- (A) $1\frac{2}{3}$ (B) $1\frac{1}{4}$ (C) $1\frac{3}{4}$ (D) $2\frac{1}{4}$
27. How many fifths are there in $3\frac{1}{5} + 4\frac{3}{5}$?
- (A) 18 (B) 28 (C) 39 (D) 42
28. Reena eats one full bar of chocolate. Then she divides another one into 5 equal parts and eats 3 of those parts. The fraction of chocolates she has eaten is:
- (A) $\frac{2}{5}$ (B) $\frac{3}{5}$ (C) $\frac{8}{5}$ (D) $\frac{8}{10}$
29. If $\frac{3}{4} = \frac{x}{28} = \frac{y}{32}$, then the values of x and respectively are _____ and _____.
- (A) 21, 24 (B) 21, 28 (C) 18, 24 (D) 21, 25
30. Ritu painted $\frac{2}{5}$ of the walls in her room. Her sister Rashmi helped and painted $\frac{3}{5}$ of the walls. How much did they paint together?
- (A) $\frac{5}{10}$ (B) $\frac{6}{25}$ (C) $\frac{1}{5}$ (D) 1
31. What is the value of $11.006 + 34 + 0.72$ rounded to the nearest tenths?
- (A) 45.1 (B) 45.7 (C) 46.7 (D) 46
32. If 0.75 of a number is 1200, then what is $\frac{5}{8}$ of that number?
- (A) 1000 (B) 1060 (C) 880 (D) 8002
33. $2 + (8 \times 0.1) + (6 \times 0.01) + (4 \times 0.001) =$
- (A) 0.2864 (B) 2.864 (C) 28.64 (D) 2864
34. Prema had Rs. 5000. She bought 2 boxes of chocolates for Rs. 52.98 each, 3 packets of chips for Rs. 12.98 each and 2 books for Rs. 300.05 each. How much money left with her?
- (A) Rs. 4255 (B) Rs. 4750 (C) Rs. 4000 (D) Rs. 3875
35. The cost of 98 notebooks is Rs. 5551.70 What is the cost of 1 such notebook?
- (A) Rs. 42.85 (B) Rs. 39.05 (C) Rs. 62.08 (D) Rs. 56.65
36. Which of the following statements is INCORRECT?
- (A) $-2 < -1$, since -2 lies on the left of -1 on the number line.
- (B) $-1 > -4$, since -1 lies on the right of (-4) on the number line.
- (C) $-4 > -5$, since -5 lies on the left of (-4) on the number line.
- (D) $-3 > -5$, since -5 lies on the right of (-3) on the number line.

37. The difference between the place values of 8 in the greatest and the smallest 4-digit numbers formed by using the digits 3, 8, 0, 5 (each digit used only once) is:
(A) 8998 (B) 6992 (C) 7992 (D) 5998
38. Mihika makes 8 gift packs containing chocolates for Diwali. She puts 12 vanilla chocolates, 14 milk chocolates and 8 nut chocolates in each pack. With the help of which property, can you calculate the total number of chocolates in 8 packs?
(A) Commutative property (B) Associative property
(C) Distributive property (D) None of these
39. When we multiply a whole number and the multiplicative identity of whole numbers, then we get.
(A) The number itself (B) The multiplicative identity
(C) 0 (D) Negative of that number
40. There are 222 red balls in a basket. A boy takes out 6 red balls from it and replaces them by 12 white balls. He continues to do so, till all red balls are replaced by white balls. Then the total number of white balls put in the basket is:
(A) 333 (B) 444 (C) 345 (D) 400
41. The value of $(-172) + (-40) + 5 + (-425) + (-275) + 600 - (-15)$ is:
(A) 315 (B) -201 (C) 400 (D) -292
42. Which of the following options shows the given number sentence?
 $-13 + (-3) = -16$
(A) When two positive integers are added, we get a positive integer.
(B) When two negative integers are added, we get a negative integer.
(C) The subtraction of an integer is the same as addition of its additive inverse
(D) All of these
43. Zero is _____ every negative integer.
(A) Smaller than (B) Greater than (C) Equal to (D) None of these
44. Arun has Rs. 125 in his savings account. He withdraws a cheque of Rs. 117, makes a deposit of Rs. 45 and then withdraws another cheque of Rs. 69. Find the amount left in his account. (Write the amount as an integer.)
(A) Rs. (-16) (B) Rs. 16 (C) Rs. 30 (D) Rs. (-30)
45. Suman did a multiplication sum of 104×25 and got the answer. She suddenly realize that the question written on the blackboard was 104×52 . What will be the difference between her answer and the required answer?
(A) 2588 (B) 2808 (C) 2800 (D) 2890

SECTION - III [SCIENCE]

46. In lateral inversion:
(A) Image is upside down
(B) Image bends laterally
(C) Left of an object appears right of an image
(D) Image gets inverted
47. The process of returning back of light ray from a shining surface is called:
(A) Reflection (B) Refraction (C) Inversion (D) Lateral inversion
48. The image formed in water is:
(A) Erect (B) Diminished (C) Inverted (D) Enlarged
49. Which of these appliances in your homes is not run by electricity?
(A) Geyser (B) Gas burner (C) Air conditioners (D) Music system
50. Which of these does not conduct electricity?
(A) Brass spoon (B) Silver jewellery
(C) Steel tumbler (D) Plastic jug
51. An electric cell can generate electric current in a:
(A) Open circuit (B) Closed circuit (C) Both of these (D) None of these
52. When we spread our clothes in the Sun, the water?
(A) Transpires (B) Respires (C) Transports (D) Evaporates
53. Evaporation of water from the soil surface is due to heat from:
(A) Sun (B) Earth (C) Moon (D) Fire
54. Water occurs in the atmosphere in how many forms?
(A) One (B) Two (C) Three (D) Four
55. Which of the following process is carried out on looms?
(A) Weaving (B) Knitting (C) Ginning (D) Spinning
56. Cotton bolls are which part of the plant?
(A) Flower (B) Fruit (C) Stem (D) Root
57. Takili is a device used for:
(A) Ginning (B) Weaving (C) Knitting (D) Spinning
58. Earth worm takes oxygen from the soil through:
(A) Lungs (B) Gills (C) Moist skin (D) Spiracles
59. Oxygen and carbon dioxide are replaced in nature through:
(A) Photosynthesis (B) Respiration
(C) Both (A) and (B) (D) None of these
60. Air is a type of:
(A) Mixture (B) Compound (C) Gas (D) Element

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