

Important Instructions:-

1. Immediately fill in the particulars on this page of the Test with Black/Blue Ball Point .
2. The test is of **1** hour duration.
3. The Test consists of **50** questions.
4. The maximum marks are **160**.
5. There are three parts in the question paper I, II, III consisting of Quick Answer Types ,Logical and Analytical Reasoning and Aptitude respectively
6. **PART I** carries question of **2** marks.
7. **PART II** carries question of **4** marks.
8. **PART III** carries question of **4** marks.
9. Quick Answer Type questions will be applicable for 10 minutes.

10. Invigilators have to take Part I of paper from students after 10 minutes are over from the start

11. Candidates will be awarded marks as stated above in instruction No. 6, 7, and 8 for correct response of each question.
12. No deduction from the total score will be made if no response is indicated for an item in the answer sheet.
13. There is only one correct response for each question. Filling up more than one response in any question will be treated as wrong response
14. For writing particulars/marking responses on Side-1 and Side-2 of the Answer Sheet use only Black Ball Point Pen provided in the examination hall.
15. No candidate is allowed to carry any textual material, printed or written, bits of papers, pager, mobile phone, any electronic device, etc. except the Admit Card inside the examination room/ hall.
16. Rough work is to be done on the space provided for this purpose in the Test Booklet only. This space is given at the bottom of each page.
17. On completion of the test, the candidate must hand over the Answer Sheet to the Invigilator on duty in the Room/Hall.
18. In case of discrepancy, the candidate should immediately report the matter to the Invigilator for replacement of both the Test Booklet and the Answer Sheet.
19. Do not fold or make any stray mark on the Answer Sheet.
20. **25% negative marking for incorrect questions.**

Name of the Candidate (in Capital letters) : _____

Roll Number : in figures _____

: in words _____

Name of Examination Centre (in Capital letters) : _____

Candidate's Signature

1. Invigilator's Signature : _____

2. Invigilator's Signature : _____

PART I

QUICK ANSWER TYPES

1. The control unit of cell is?
(A) Nucleus
(B) Cell wall
(C) Cytoplasm
(D) All of these
2. Electroplating is based on?
(A) Magnetic effect of electricity
(B) Chemical effect of electricity
(C) Heating effect of electricity
(D) Physical effect of electricity
3. The first oil well was drilled in?
(A) USA
(B) USSR
(C) UK
(D) India
4. Examples of kharif crops are?
(A) Wheat and maize
(B) Gram and maize
(C) paddy and Maize
(D) All of these
5. Two pipes A and B can fill a tank in 15 minutes and 20 minutes respectively. Both the pipes are opened together but after 4 minutes, pipe A is turned off. What is the total time required to fill the tank?
(A) 10 min. 20 sec.
(B) 11 min. 45 sec.
(C) 12 min. 30 sec.
(D) 14 min. 40 sec.
6. A plant that has both autotrophic and heterotrophic mode of nutrition is?
(A) Pitcher plant
(B) Cuscuta
(C) Cactus
(D) Mushroom
7. A boat sails 15 km of a river towards upstream in 5 hours. How long will it take to cover the same distance downstream, if the speed of current is one-fourth the speed of the boat in still water:
(A) 1.8h
(B) 3h
(C) 4h
(D) 5h
8. The formula for quicklime is?
(A) CaCl_2
(B) CaCO_3
(C) Ca(OH)_2
(D) CaO
9. A batsman makes a score of 87 runs in the 17th inning and thus increases his average by 3. Find his average after 17th inning?
(A) 87
(B) 38
(C) 49
(D) 84

10. Penicillium is a/an?
 (A) Algae
 (B) Fungus
 (C) Bacteria
 (D) Yeast
11. At what rate percent per annum will a sum of money double in 8 years?
 (A) 12.5%
 (B) 13.55%
 (C) 11.5%
 (D) 14.5%
12. The electronic configuration of chlorine is?
 (A) 2,7
 (B) 2,8,8,7
 (C) 2,8,7
 (D) 2,7,8
13. Tea worth Rs. 135/kg & Rs. 126/kg are mixed with a third variety in the ratio 1:1:2. If the mixture is worth Rs. 153 per kg, The price of the third variety per kg will be _____?
 (A) Rs. 169.50
 (B) Rs. 170.00
 (C) Rs. 175.50
 (D) Rs. 180
14. A, B and C can do a piece of work in 24 days, 30 days and 40 days respectively. They began the work together but C left 4 days before the completion of the work. In how many days was the work completed?
 (A) 11 days
 (B) 12 days
 (C) 73 days
 (D) 14 days
15. When two forces act in opposite directions. then net force acting two forces?
 (A) Sum of two forces
 (B) Dfference between two forces
 (C) Both of these
 (D) None of these
16. A works twice as fast as B.If B can complete a work in 18 days independently,the number of days in which A and B can together finish the work is:
 (A) 4 days
 (B) 6 days
 (C) 8 days
 (D) 10 days
17. If each edge of a cube is increased by 50%, find the percentage increase in It's surface area
 (A) 125%
 (B) 150%
 (C) 175%
 (D) 110%
18. Rolling friction is smaller than?
 (A) Sliding friction
 (B) Static friction
 (C) Fluid friction
 (D) All of the above
19. A rectangular block 6 cm by 12 cm by 15 cm is cut up into an exact number of equal cubes. Find the least possible number of cubes?
 (A) 30
 (B) 40
 (C) 10
 (D) 20

20. A cistern 6m long and 4 m wide contains water up to a depth of 1 m 25 cm. The total area (m²) of the wet surface is:
- (A) 49
(B) 50
(C) 53.5
(D) 55

PART II
Aptitude

21. In four years' time the combined age of my three cousins and me will be 208. What will be the combined age in seven years' time?
- (A) 240
(B) 270
(C) 220
(D) 250
22. Mo, Jo and Flo share out a certain sum of money between them. Mo receives 5/8, Jo receives 0.25 and Flo receives Rs 7.50. How much is the original sum of money?
- (A) 40
(B) 55
(C) 60
(D) 50
23. Pulp : Paper : : Hemp : ?
- (a) Basket
(b) Yarn
(c) Rope
(d) Cotton
24. How many boxes measuring 1 metre × 1 metre × 50 cm can be packed into a container measuring 8 × 6 × 6 metres?
- (A) 576
(B) 428
(C) 625
(D) 875

25. FILM : ADGH : : MILK : ?
- (A) ADGF
(B) HDGE
(C) HDGF
(D) HEGF

26. If A = 2 M = 26 Z = 52 then BET = ?
- (A) 44
(B) 54
(C) 64
(D) 72

27. How many $\frac{1}{8}$ s are there in $37\frac{1}{2}$?
- (A) 300
(B) 400
(C) 500
(D) Cannot be determined

28. If $2 = x + \frac{1}{1 + \frac{1}{3 + \frac{1}{4}}}$, then the value of x is
- (A) $\frac{12}{17}$
(B) $\frac{13}{17}$
(C) $\frac{18}{17}$
(D) $\frac{21}{17}$

29. abb__ab_b_bba_a
- (A) bbbab
(B) babba
(C) abaab
(D) bbabb

30.

7B	5C	6B
3C	9B	19A
15A	17A	?

- (A) 10C
- (B) 12C
- (C) 14B
- (D) 16C

31. Two pipes A and B can fill a tank in 12 minutes and 15 minutes respectively. If both the taps are opened simultaneously, and the tap A is closed after 3 minutes, then how much more time will it take to fill the tank by tap B?

- (A) 7 min 15 sec
- (B) 7 min 45 sec
- (C) 8 min 5 sec
- (D) 8 min 15 sec

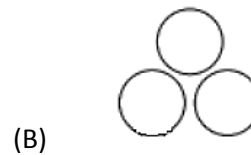
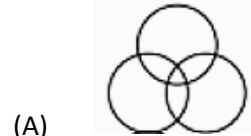
32. Pointing towards Rita, Nikhil said, "I am the only son of her mother's son." How is Rita related to Nikhil?

- (A) Aunt
- (B) Niece
- (C) Mother
- (D) Cousin

33. A is faster than B. A and B each walk 24 km. The sum of their speeds is 7 km/hr and the sum of times taken by them is 14 Hours. Then as speed is equal to:

- (A) 3 km/hr
- (B) 4 km/hr
- (C) 5 km/h
- (D) 7 km/hr

34. Each equation below has three items having certain relationship among them. The same relationship is expressed by Sets of circles, each circle representing One item irrespective of its size. Match the items with right set of circles.
Copper, cobalt, silver



35. A vessel is filled with liquid, 3 parts of which are water and 5 parts syrup. How much of the mixture must be drawn off and replaced with water so that the mixture may be half water and half syrup?

- (A) $\frac{1}{3}$
- (B) $\frac{1}{4}$
- (C) $\frac{1}{5}$
- (D) $\frac{1}{7}$

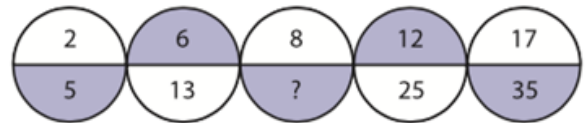
PART III
LOGICAL AND ANALYTICAL REASONING

36. identify the rule and find the missing number in place of the question mark?

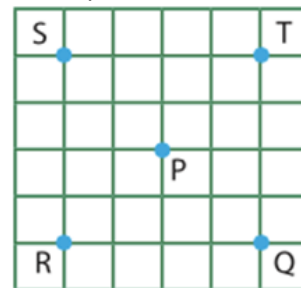
256	128	32
112	56	14
800	400	?

- (A) 200
(B) 100
(C) 25
(D) 50
37. Look at this series: 80 10 70 15 60....
What number should come next?
(A) 20
(B) 25
(C) 30
(D) 50
38. In a day of foraging, a tramp collects 49 candy ends. He knows that for every 7 candy ends he can make a new candy How many candies can the tramp make and then actually smoke?
(A) 8
(B) 7
(C) 6
(D) 5
39. What number comes next in this sequence?
1,4,9,16 , ,36
(A) 25
(B) 32
(C) 27
(D) 36

40. What is the missing number in the given series below?



- (A) 17
(B) 27
(C) 35
(D) 41
41. Which point is north-west of P?



- (A) P
(B) Q
(C) R
(D) S
42. Priti scored more than Rahul. Yash scored as much as Divya. Latika scored less than Manju. Rahul scored more than Yash. Manju scored less than Divya. Who scored the lowest?
(A) Manju
(B) Yash
(C) Latika
(D) Rahul

43. Arrange the words given below in a meaningful sequence. 1.Presentation
2.Recommendation 3. Arrival 4.Discussion
5.Introduction?
- (A) 5, 3, 4, 1, 2
(B) 3, 5, 4, 2, 1
(C) 3, 5, 1, 4, 2
(D) 5, 3, 1, 2, 4
44. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was:
- (A) 2500
(B) 2700
(C) 2900
(D) 3100
45. A bag contains 50 P, 25 P and 10 P coins in the ratio 5: 9: 4, amounting to Rs. 206. Find the number of coins of each type respectively.
- (A) 360, 160, 200
(B) 160, 360, 200
(C) 200, 360,160
(D) 200,160,300
46. Pointing to Ketan, Namrata said, "He is the son of my father's only son."
How is Ketan's mother related to Namrata?
- (A) Daughter
(B) Aunt
(C) Sister
(D) Sister-in-law
47. If 20% of a = b, then b% of 20 is the same as:
- (A) 4% of a
(B) 6% of a
(C) 8% of a
(D) 10% of a
48. If each edge of a cube is decreased by 50%, find the percentage decreased in its surface area?
- (A) 25%
(B) 50%
(C) 75%
(D) 10%
49. A is B's sister. C is B's mother. D s C's father. E is D's mother. Then, how is a related to D?
- (A) grandfather
(B) grandmother
(C) daughter
(D) granddaughter
50. A student multiplied a number by $\frac{3}{5}$ instead of $\frac{5}{3}$, What is the percentage error in the calculation ?
- (A) 54 %
(B) 64 %
(C) 74 %
(D) 84 %