

PACE - IIT & MEDICAL

Delhi/ Ghaziabad /Mumbai/ Pune / Goa/ Akola/ Nashik/ Kolkata / Lucknow / Bokaro/ Dubai

Admission cum Scholarship Test for SUPER-50

Standard: 7th

Set - 1

DURATION: 1 HOUR

TOTAL MARKS: 120

INSTRUCTIONS: {Paper consists of the following sections}

Section - I : Mathematics : Q. No. **01 to 10**

Section - II : Science : Q. No. **11 to 20**

Section - III : Mental Ability : Q. No. **21 to 30**

1. This booklet is your question paper. Answers have to be marked on the provided OMR sheet.
2. Space for rough work is provided in the question paper.
3. Log tables, Slide rule, Calculators, Cellular phones and other Electronic devices in any form are NOT allowed in the examination hall.
4. If a student is caught copying, he / she will not be allowed to write the exam.
5. On the OMR sheet, write your name, roll number, mobile number, paper code and put your signature in the appropriate boxes.
6. There are total 30 questions in this paper. Only one choice is correct. Each question carries **+4** for correct answer & **0** for wrong answer.

**NOTE: THE RESULT WILL BE ANNOUNCED ON 5TH OCTOBER 2025
AT PACE RDC CENTRE**

INTRODUCING

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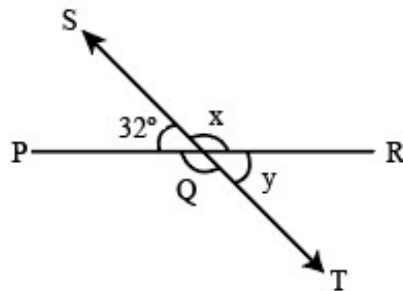


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PACE RDC : C - 9, 2nd Floor, RDC, Ghaziabad, Tel. : 9582633559, 9999761600

MATHEMATICS

1. In a quiz, team A scored $-40, 10, 0$ and team B scored $10, 0, -40$ in three successive rounds. Which team scored more?
 (a) Team A (b) Team B
 (c) Equal score (d) Cannot be determined
2. If the LCM of three numbers is 9570, then their HCF is
 (a) 11 (b) 12 (c) 19 (d) 21
3. What is the 4th term of a pattern described by the expression $n^2 + 1$, if $n \in \mathbb{N}$
 (a) 18 (b) 17 (c) 24 (d) 16
4. The median of the data 20, 30, 40, 10, 15, 25, 35 is
 (a) 20 (b) 25 (c) 30 (d) 40
5. Three fourth of a number is 60 more than its one-third. The number is?
 (a) 84 (b) 108 (c) 144 (d) 160
6. In the given figure, what is the measure of x ?



- (a) 32° (b) 148° (c) 64° (d) 180°

SPACE FOR ROUGH WORK

7. A 26 m long ladder reached a window 24 m from the ground on placing it against a wall. Find the distance of the foot of the ladder from the wall.
(a) 10 m (b) 20 m (c) 5 m (d) 25 m
8. Income of a person is Rs. 50,000. He pays income tax at the rate of 15%. Find the amount of income tax.
(a) 750 Rupees (b) 7500 Rupees
(c) 1500 Rupees (d) 75 Rupees
9. Which of the following statement is false?
(a) Natural numbers are closed under addition
(b) Whole numbers are closed under addition
(c) Integers are closed under addition
(d) Rational numbers are not closed under addition
10. The area of a rectangular field is 250 m^2 . If the breadth of the field is 10 m, find its length.
(a) 25 m (b) 50 m
(c) 100 m (d) 125 m

SCIENCE

11. Name the physical quantity which gives us an idea of how slow or fast a body is moving.
(a) Distance travelled (b) Time taken
(c) Speed (d) None of these
12. Light is a form of _____.
(a) Temperature (b) Force
(c) Energy (d) None of these

SPACE FOR ROUGH WORK

13. _____ is the change in position of an object with respect to a fixed position with time.
(a) Force (b) Energy (c) Motion (d) None of these
14. In which type of change a new substance is formed?
(a) In physical change
(b) In chemical change
(c) In both (a) and (b)
(d) In neither of these
15. The cyclone alert is announced with the help of a
(a) Satellite (b) Sun (c) Moon (d) Star
16. When ice is heated, it changes to water and water on further heating gets converted to steam. What happens when steam is condensed?
(a) A new substance is formed
(b) No new substance is formed
(c) Gaseous phase changes to liquid phase
(d) Both B and C are correct
17. The relationship between the bacteria rhizobium and the leguminous plant
(a) Saprophytic (b) Symbiotic (c) Parasitic (d) Commensalism
18. The other name of food pipe is
(a) Trachea (b) Larynx
(c) Oesophagus (d) Pharynx
19. A carnivore with stripes on its body moves very fast while catching its prey. It is likely to be found in
(a) Polar regions (b) Deserts
(c) Oceans (d) Tropical rainforests
-

SPACE FOR ROUGH WORK

20. Elements of weather are
- | | |
|-----------------|------------------|
| (a) Temperature | (b) Humidity |
| (c) Rainfall | (d) All of these |

MENTAL ABILITY - (MAT)

21. Which number should come next in the series: 2, 4, 8, 16, ?
- | | | | |
|--------|--------|--------|--------|
| (a) 18 | (b) 20 | (c) 24 | (d) 32 |
|--------|--------|--------|--------|
22. If in a code language, DOG is written as FQI, how is CAT written?
- | | |
|---------|---------|
| (a) ECV | (b) DCV |
| (c) EBU | (d) DBU |
23. Which one of the following is different from the others?
- | | |
|-----------|------------|
| (a) Apple | (b) Orange |
| (c) Mango | (d) Carrot |
24. What will be the next figure in the sequence: 
- | | |
|---|---|
| (a)  | (b)  |
| (c)  | (d)  |
25. Which number is missing: 3, 6, 11, 18, ?, 38
- | | |
|--------|--------|
| (a) 27 | (b) 28 |
| (c) 29 | (d) 30 |
26. If 'A' is coded as 1, 'B' as 2, ..., then what is the code for 'CAB'?
- | | |
|---------|---------|
| (a) 312 | (b) 123 |
| (c) 321 | (d) 213 |

SPACE FOR ROUGH WORK

27. Which word does not belong to the group?
(a) Rose (b) Lily
(c) Lotus (d) Mango
28. Find the odd one out: 64, 125, 216, 343, 500
(a) 125 (b) 343 (c) 500 (d) 216
29. If the day after tomorrow is Friday, what day was it yesterday?
(a) Tuesday (b) Wednesday
(c) Thursday (d) Monday
30. Choose the correct mirror image of 'bqp'.
(a) pqd (b) dbq (c) pbd (d) dpq

SPACE FOR ROUGH WORK