



General Instructions

- (i) The test is of 1 hour duration.
- (ii) The question paper consists of 50 questions. The maximum marks are 250.
- (iii) 5 marks are awarded for every correct answer, and 1 mark is deducted for every wrong answer.

1. The volume of a right circular cone is 1232 cm^3 and its height is 14 cm. Find the radius of the base (use $\pi = 22/7$).

- (A) 7 cm
- (B) 14 cm
- (C) 21 cm
- (D) 28 cm

2. If $\sin \theta = 3/5$ and θ is an acute angle, then the value of $(\sec \theta + \tan \theta)$ is :

- (A) $8/4$
- (B) $5/3$
- (C) $17/8$
- (D) $17/3$

3. The mean of 5 numbers is 28. If one number is excluded, the mean of the remaining 4 numbers becomes 25.5. The excluded number is:

- (A) 35
 - (B) 36
 - (C) 37.5
 - (D) 40
-

4. How many ways can 4 boys and 3 girls be seated in a row such that all girls sit together?

- (A) 720
 - (B) 144
 - (C) 840
 - (D) 5040
-

5. The 7th term of an Arithmetic Progression is 40 and the 13th term is 70. Find the 21st term of the AP.

- (A) 100
 - (B) 110
 - (C) 120
 - (D) 130
-

6. The LCM of two numbers is 180 and their HCF is 6. If one of the numbers is 30, find the other number.

- (A) 36
 - (B) 42
 - (C) 45
 - (D) 54
-

7. A can complete a work in 12 days and B can complete the same work in 18 days. If A and B work together for 4 days and then A leaves, how many more days will B take to finish the remaining work?

- (A) 6 days
 - (B) 8 days
 - (C) 9 days
 - (D) 10 days
-

8. Find the compound interest on 8000 for 2 years at 10% per annum compounded annually.

- (A) 1680
 - (B) 1720
 - (C) 1760
 - (D) 1800
-

9. In a certain code language, 'P is brother of Q' is written as 'P#Q', 'Q is sister of R' is written as 'Q\$R', 'R is father of S' is written as 'R@S'. How is P related to S?

- (A) Uncle
 - (B) Brother
 - (C) Father
 - (D) Grandfather
-

10. At what time between 4 and 5 o'clock will the hands of a clock be at right angles for the first time? (Approximately)

- (A) 4:05
 - (B) 4:38
 - (C) 4:55
 - (D) 4:22
-