

Note:

Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1.1 Symbol used for 'approximate' is:

- (A) \approx (B) \div
(C) $=$ (D) \cong

2 A parallelogram has _____ right angles.

- (A) 0 (B) 1
(C) 2 (D) 3

3 HCF of $x^2 - 5x + 6$ and $x^2 - x - 6$ is:

- (A) $x - 3$ (B) $x + 2$
(C) $x^2 - 4$ (D) $x - 2$

4 If $\frac{2}{3}x - 6 = 0$ then x is equal to:

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

5 One angle on the base of an isosceles triangle is 30° , its vertical angle is:

- (A) 30° (B) 60°
(C) 90° (D) 120°

6 A line segment has _____ end points:

- (A) 2 (B) 3
(C) 4 (D) 5

7 A triangle having all sides different is called:

- (A) Isosceles (B) Scalene
(C) Equilateral (D) None of these

8 $(\sqrt{a} + \sqrt{b})(\sqrt{a} - \sqrt{b})$ is equal to:

- (A) $a^2 + b^2$ (B) $a^2 - b^2$
(C) $a - b$ (D) $a + b$

9 $x = 0$ is the solution of the inequality _____:

- (A) $x > 0$ (B) $x + 2 < 0$
(C) $3x + 5 < 0$ (D) $x - 2 < 0$

10 _____ has no unit.

- (A) Ratio (B) Length
(C) Area (D) Perimeter

11 Factors of $a^4 - 4b^4$ are _____:

- (A) $(a - b)(a + b)(a^2 + 4b^2)$
(B) $(a - b)(a + b)(a^2 - 4b^2)$
(C) $(a^2 - 2b^2)(a^2 + 2b^2)$
(D) $(a - 2b)(a^2 + 2b^2)$

12 The value of $\log\left(\frac{p}{q}\right)$ is:

- (A) $\frac{\log p}{\log q}$ (B) $\log p - \log q$
(C) $\log q - \log p$ (D) $\log^2 p + \log^2 q$

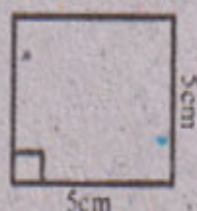
13 Point $(-3, 3)$ lies in _____ quadrant:

- (A) IV (B) III
(C) I (D) II

14 The conjugate of $5 + 4i$ is:

- (A) $-5 + 4i$ (B) $-5 - 4i$
(C) $5 - 4i$ (D) $5 + 4i$

15 Area of given figure is:



- (A) 5 cm^2 (B) 20 cm^2
(C) 10 cm^2 (D) 25 cm^2