Practice Paper-5

SECTION-A

➢ Answer the following questions as required. (Que. 1 to 24) (1 mark each) [24]

● **Choose the right option So that the statement become true (Que. No. 1 to 6)**

1. HCF (a, b) = 16 then LCM is not _____.
   (A) 64 (B) 32 (C) 72 (D) 96

2. The Geometric representation of the pair of linear equation $2x + 3y - 8 = 0$ and $4x + 6y - 16 = 0$ is _____.
   (A) intersecting lines (B) Coincident lines
   (C) Parallel lines (D) None of above.

3. If $\frac{5}{x} + \frac{4}{y} = 7$ and $\frac{4}{x} + \frac{5}{y} = 2$, then $\frac{1}{x} - \frac{1}{y} =$ ____.
   (A) 2 (B) 5 (C) 7 (D) 9

4. For and AP, d = 5, a = $\frac{-35}{3}$, $a_9 = \frac{85}{3}$ then S_9 = _____.
   (A) −35 (B) 75 (C) 85 (D) 35

5. Which of the following equations is not a quadratic equation ?
   (A) $4x^2 - 7x + 3 = 0$ (B) $3x^2 - 4x + 1 = 0$
   (C) $2x - 7 = 0$ (D) $4x^2 - 3 = 0$

6. If A(0, 0), B(2, 0), C(2, 2) and D(0, 2), then □ABCD is _____.
   (A) rectangle
   (B) Trapezoidal quadrilateral
   (C) Square
   (D) equilateral quadrilateral

● **Choose the correct answers from the answer given in brackets and write the following statement as true : (Que. No. 7 to 12)**

7. All _____ triangle are converent.
   (equailteral, rectangle, right triangle)

8. If tangents PA and PB from a point P to a circle with centre O case inclined to each other of angle of 80°, then ∠POA is _____. (50°, 80°, 100°)

9. In ⊙ (0, 8) the minor $\overset{\frown}{PRQ}$ is m∠POQ = 45°, then the minor $\overset{\frown}{PRQ}$ length is _____. (π, 2π, 4π)

10. If $\Sigma f_i = 100$, $a = 25$, $\bar{x} = 25$, then $\Sigma f_i d_i$ = _____.
    (0, 25, 50)

11. The distance of the point (20, 21) from the origin is _____. (20, 21, 29)

12. The formula for finding the volume of a 5 Rupee coin is _____. (πr^2, $\pi r^2 h$, $\frac{1}{3}\pi r^2 h$)

● **State whether the following statements are true or false : (Que. No. 13 to 16)**

13. $\sqrt{18} \times \sqrt{8}$ is an irrational numbers.

14. Exponent of linear polynomial is O.

15. $x + \frac{1}{x}$ is not a quadratic polynomial.

16. The value of sin θ increases as the value of θ increases from 0° to 90°.

● **Answer the following questions in one sentence, word or numbers : (Que. No. 17 to 20)**

17. State the formula for finding the TSA of 10 rupee coin.

18. A data of $\frac{x}{5}$, x, $\frac{x}{4}$, $\frac{x}{2}$ and $\frac{x}{3}$ also $x > 0$. If median of information is 8 then find x.

19. What is the probability of the event who is born must die?

20. Which Arab mathematician studied different types of plynomial equations ?

● **Match following : (Que. No. 21 to 24)**

	(A)	(B)
21.	Zeroes of $P(x) = 2x + 6$	(a) 3
22.	Zeroes of $P(x) = 2x - 6$	(b) 0
		(c) −3

	(A)	(B)
23.	$\sec^2 A - \tan^2 A$	(a) −1
24.	$\cot^2 A - \text{cosec}^2 A$	(b) 1
		(c) 0