

SATISH CHANDRA MEMORIAL SCHOOL

PRACTICE TEST (2025-26)

XI

MATHEMATICS (041)

Time allowed: 30 min

Maximum Marks: 20

PART-I (2 X 5 = 10)

1. The equation of a line which passes through the point of intersection of $2x - 5y + 3 = 0$ & $4x - 3y = 0$ & is parallel to the line $4x + 5y + 6 = 0$:

A) $28x + 35y + 48 = 0$	B) $28x - 35y + 48 = 0$
C) $28x + 35y - 48 = 0$	D) None of above

2. The distance of the point $P(-1,1)$ from the line $12(x + 6) = 5(y - 2)$:

A) 5 units	B) 6 units
C) 7 units	D) None of above

3. Equation of line equidistant from $12x - 5y + 7 = 0$ & $12x - 5y - 13 = 0$:

A) $12x - 5y + 3 = 0$	B) $12x - 5y - 3 = 0$
C) $12x + 5y - 3 = 0$	D) None of above

4. If the lines $2x + y - 3 = 0$, $5x + ky - 3 = 0$, $3x - y - 2 = 0$ are concurrent, then 'k' equals:

A) -4	B) -3
C) -2	D) None of above

5. The foot of the perpendicular from $(2, 3)$ to the line $x + y - 11 = 0$:

A) $(5, 6)$	B) $(6, 5)$
C) $(-5, -6)$	D) None of above

PART-II (2 X5 =10 MARKS)

Q6. Prove geometrically that:

$$\lim_{x \rightarrow 0} \frac{\sin x}{x} = 1$$

Q7. Find the coordinates of the orthocentre of the triangle ABC whose vertices are $A(-1, 3)$, $B(2, -1)$, $C(0, 0)$.