BASIC MATHMATICS

DPP - 1

STRAIGHT LINE & QUADRATIC EQUATION

Q.1 If $ax^2 + bx + c = 0, a \neq 0$, then

(A) $x = -\frac{b \pm \sqrt{b^2 - 4ac}}{2}$

(B) $x = -\frac{b \pm \sqrt{b^2 - 4ac}}{4}$

(C) $x = -\frac{b \pm \sqrt{b^2 - 4ac}}{2a}$

(D) $x = -\frac{b \pm \sqrt{b^2 - 4ac}}{4a}$

Q.2 If $3x^2 + 8x + 5 = 0$, then

(A) $x = 1$ (B) $x = \frac{5}{3}$ (C) $x = -1$ (D) $x = -\frac{5}{3}$

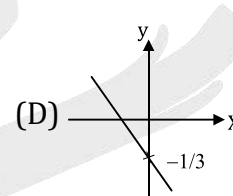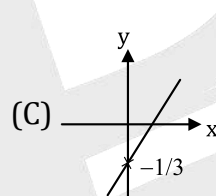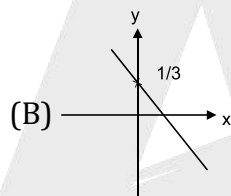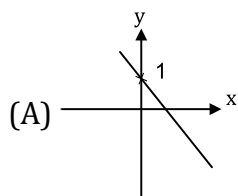**Q.3** An equation of straight line $ay = bx + c$ is given, where a, b and c are constants. The slope of the given straight line is
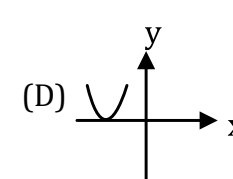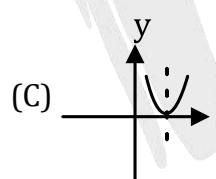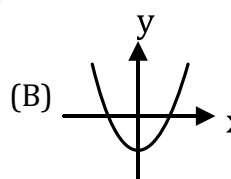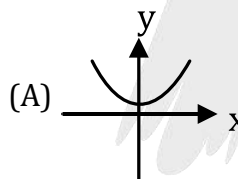
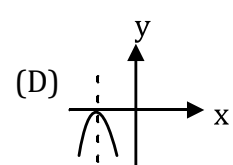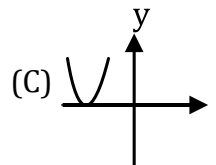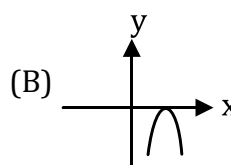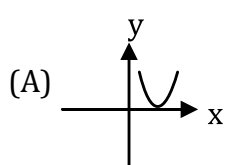(A) $-\frac{a}{b}$ (B) $\frac{b}{a}$ (C) b   (D) c

Q.4 Correct graph of $3x + 4y + 1 = 0$ is

Q.5 graph of $y = 2x - 3$ is
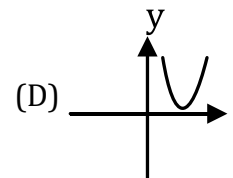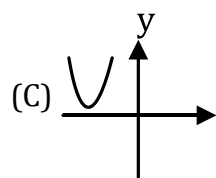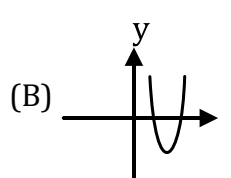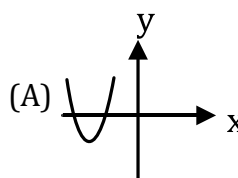

Q.6 Correct graph of $y - 1 = x^2$ is

Q.7 Correct graph of $y = -(x + 2)^2$ is

Q.8 Correct graph of $y = 2x^2 + 3x + 1$ is

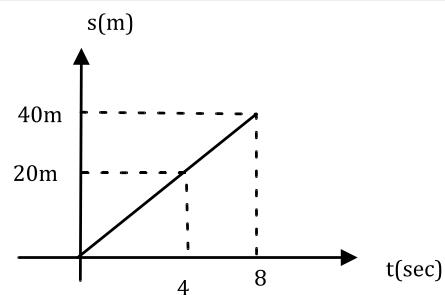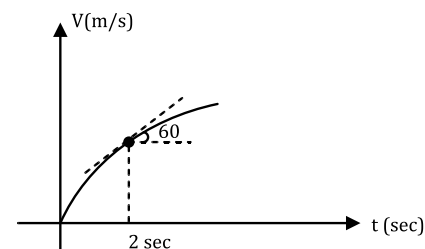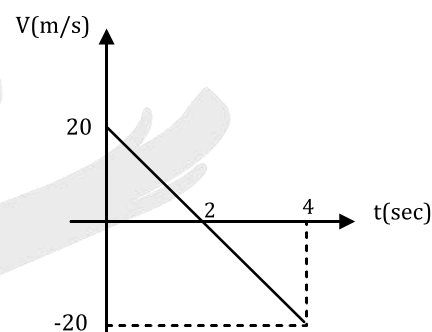**Q.9** find velocity at $t = 4$sec

(A) 5 m/s

(B) -5m/s

(C) 0

(D) N.O.T.

Q.10 find acceleration of Particle at $t = 2$sec.

(A) $\frac{-1}{\sqrt{3}}$ m/s^2

(B) $-\frac{1}{\sqrt{3}}$ m/s^2

(C) $\sqrt{3}$ m/s^2

(D) $-\sqrt{3}$ m/s^2

Q.11 find acceleration of particle at $t = 1$sec.

(A) 10 m/s^2

(B) -5 m/s^2

(C) -10 m/s^2

(D) N.O.T

ANSWER KEY

1.	(C)	2.	(C,D)	3.	(B)	4.	(D)	5.	(D)	6.	(A)	7.	(D)
8.	(A)	9.	(A)	10.	(C)	11.	(C)						