Yakeen NEET 2.0 (2026)

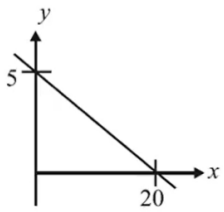
Physics by MR Sir

Basic Maths & Calculus (Mathematical Tools)

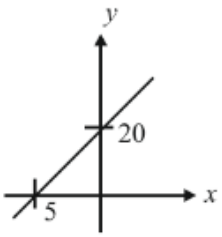
DPP: 6

Q1 In which of the following graph slope is $+4$.

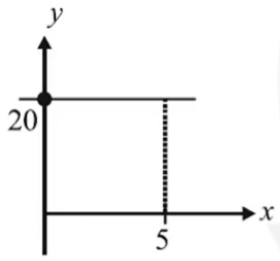
(A)



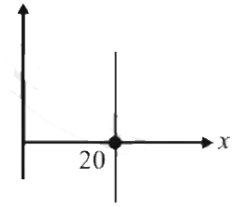
(B)



(C)

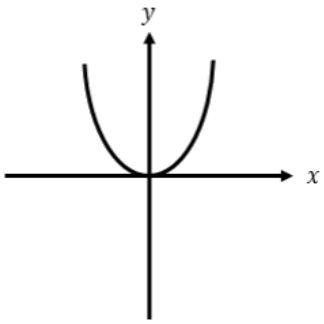


(D)

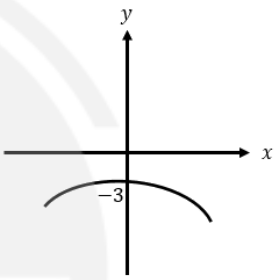


Q2 If $y = x^2 + 2x - 3, y - x$ graph is

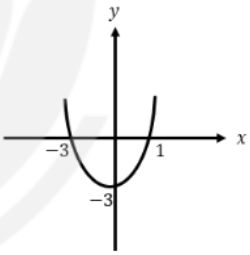
(A)



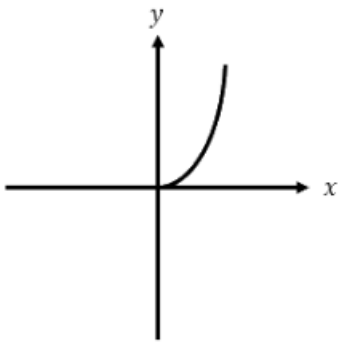
(B)



(C)



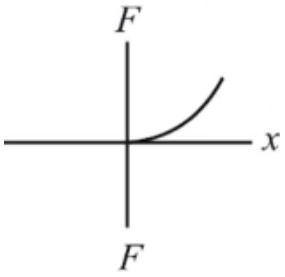
(D)



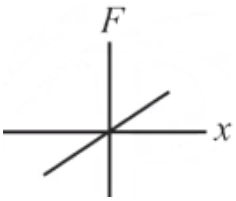
Q3 The spring force is given by $F = -kx$, here k is a constant and x is the deformation of spring.

The $F - x$ graph is

(A)



(B)



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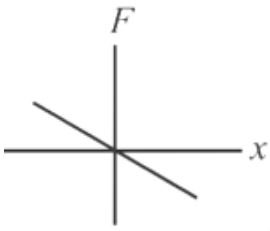
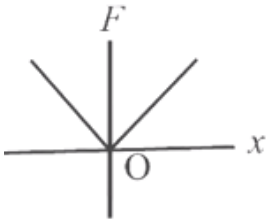
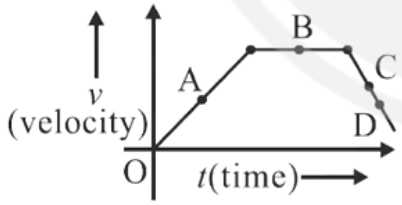


(D)



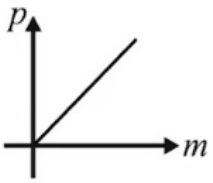
Q4 The slope of $v - t$ is zero at point:



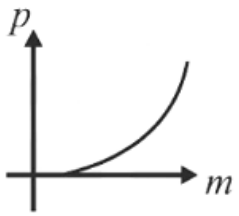
(A) A (B) B
(C) C (D) D

Q5 Draw graph between momentum (*p*) and mass (*m*) of the object for constant kinetic energy E $\left[P = \sqrt{2mE}\right]$

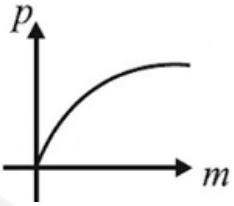
(A)



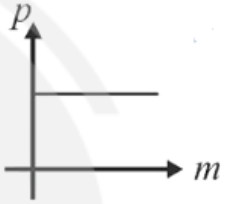
(B)



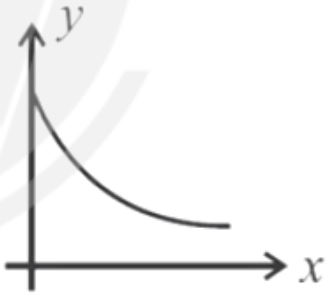
(C)



(D)

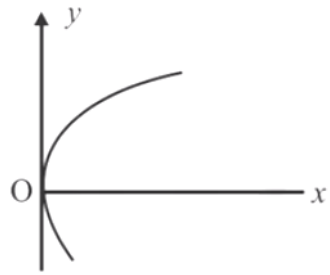


Q6 Which of the following equation is the best representation of the given graph?



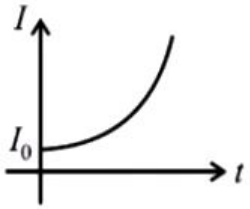
(A) $y = \frac{2}{x}$
(B) $y = e^{-x}$
(C) $y = \frac{1}{x^2}$
(D) $y = x^2$

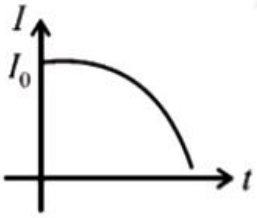
Q7 At $x = 0$, value of slope is:

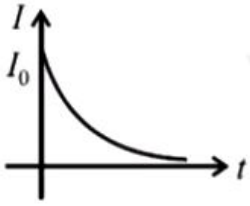


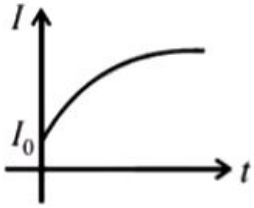
(A) 0 (B) 1
(C) -1 (D) Infinite

Q8 The variation of current flow in a circuit is given as $I = I_0 e^{-t/RC}$. The graph representing I vs t will be

(A)


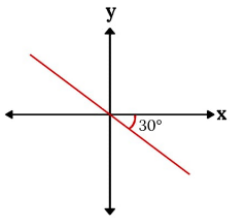
(B)


(C)


(D)


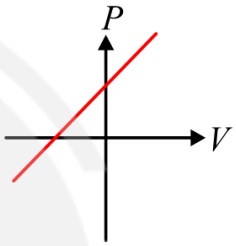
Q9 The line 4x – 9y = 11 meets y-axis at the point :
(A) $\left(-\frac{11}{9}, 0\right)$ (B) $\left(0, -\frac{11}{9}\right)$
(C) $\left(0, \frac{11}{4}\right)$ (D) $\left(0, -\frac{11}{4}\right)$

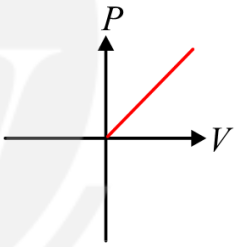
Q10 $x - y$ equation for the graph given below is:

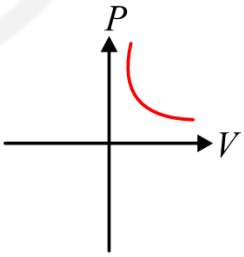


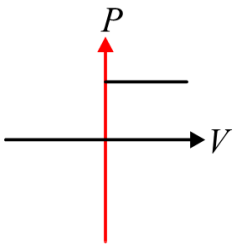
(A) $y = -\frac{x}{\sqrt{3}}$
(B) $y = \frac{x}{\sqrt{3}}$
(C) $y = \frac{x}{\sqrt{3}} + 1$
(D) $y = \frac{-x}{\sqrt{3}} - 1$

Q11 If Linear momentum $P = mV$ then draw graph between P and V.

(A)


(B)


(C)


(D)


Q12 Find the solutions of given equation:

$2x^2 + 3x - 2 = 0$

(A) $x = -3, \frac{1}{2}$

(B) $x = 3, \frac{1}{2}$

(C) $x = -2, \frac{1}{2}$

(D) $x = 2, \frac{1}{2}$

Q13 The equation $x^2 + 8x + 12 = 0$ has

(A) No root (B) One root

(C) Two roots (D) Four roots

Answer Key

Q1	(B)
Q2	(C)
Q3	(C)
Q4	(B)
Q5	(C)
Q6	(B)
Q7	(D)
Q8	(C)
Q9	(B)
Q10	(A)
Q11	(B)
Q12	(C)
Q13	(C)