Yakeen NEET 2.0 (2026)

Physics by Saleem Sir

Basic Maths and Calculus (Mathematical Tools)

DPP: 6

Q1 What is the equation to the straight line passing through (5, – 2) and (–4, 7) ?

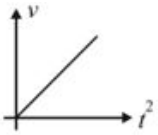
(A) 5x – 2y = 4

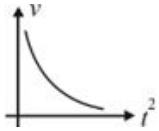
(B) –4x + 7y = 9

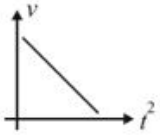
(C) x + y = 3

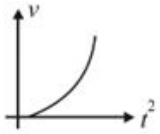
(D) x – y = –1

Q2 If velocity v varies with time t as v = t^2 then the plot between v and t^2 will be given as:

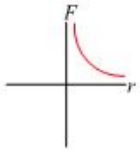
(A) 

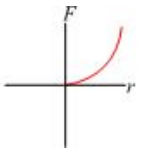
(B) 

(C) 

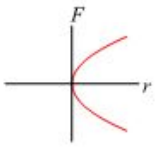
(D) 

Q3 If F = $\frac{Gm_1m_2}{r^2}$ then draw graph between *F* and *r*. (where, m_1, m_2 and *G* are constant)

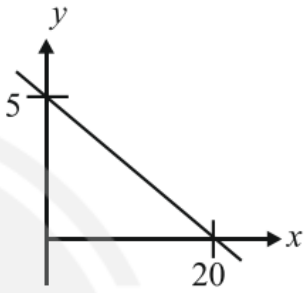
(A) 

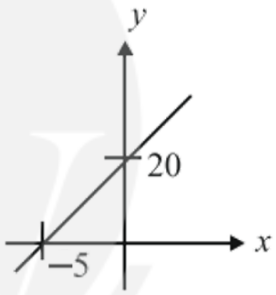
(B) 

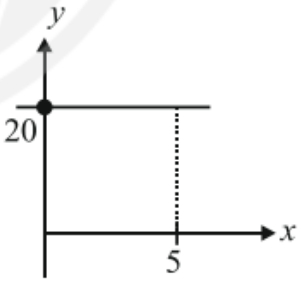
(C) 

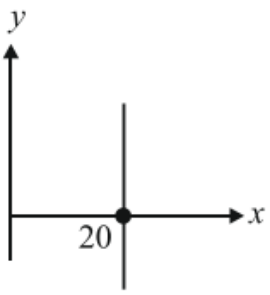
(D) 

Q4 In which of the following graph slope is '+ 4'.

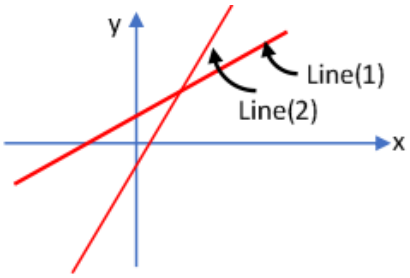
(A) 

(B) 

(C) 

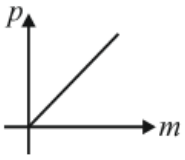
(D) 

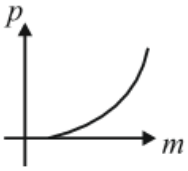
Q5 Which of the following statement is **not correct** for following straight line graph:-

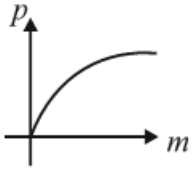


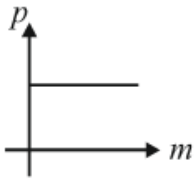
(A) Line (2) has negative y intercept
(B) Line (1) has positive y intercept
(C) Line (2) has positive slope
(D) Line (1) has negative slope

Q6 Draw graph between momentum(p) and mass(m) of the object for constant kinetic energy E $[p = \sqrt{2mE}]$

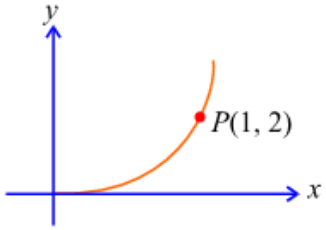
(A) 

(B) 

(C) 

(D) 

Q7 The equation of graph shown in figure is $y = 3x^2$. The slope of graph at point P is:

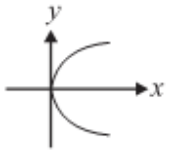


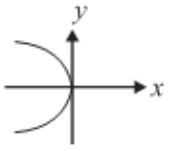
(A) 1 (B) 2
(C) 3 (D) 6

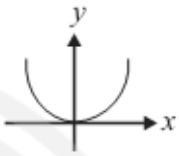
Q8 The equation of a curve is given as $y = x^2 + 2 - 3x$. The curve intersects the y-axis at:

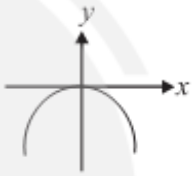
(A) (0, 1) (B) (2, 0)
(C) (0, 2) (D) (1, 0)

Q9 Which of the following can represent the curve $x^2 = -2y$?

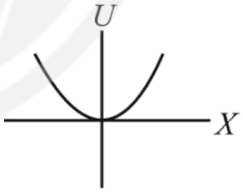
(A) 

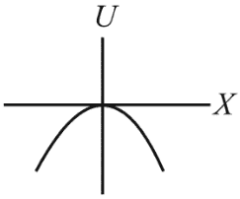
(B) 

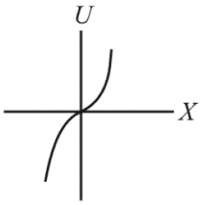
(C) 

(D) 

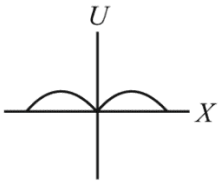
Q10 A body is attached to a spring whose other end is fixed. If the spring is elongated by x, its potential energy is $U = 5x^2$, where x is in metre and U is in joule. $U - x$ graph is

(A) 

(B) 

(C) 

(D)


U
X

Answer Key

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