

## REVISION PRACTICE ASSIGNMENT (RPA)

### SUBJECT-\_\_PHYSICS

SESSION-2020-21

CLASS-IX

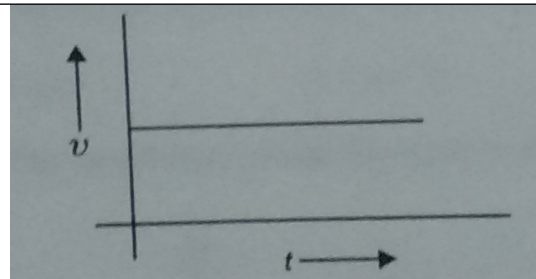
### TOPIC: CHAPTER\_08\_ MOTION

SCETION :- I : Objective Questions : MCQ Types

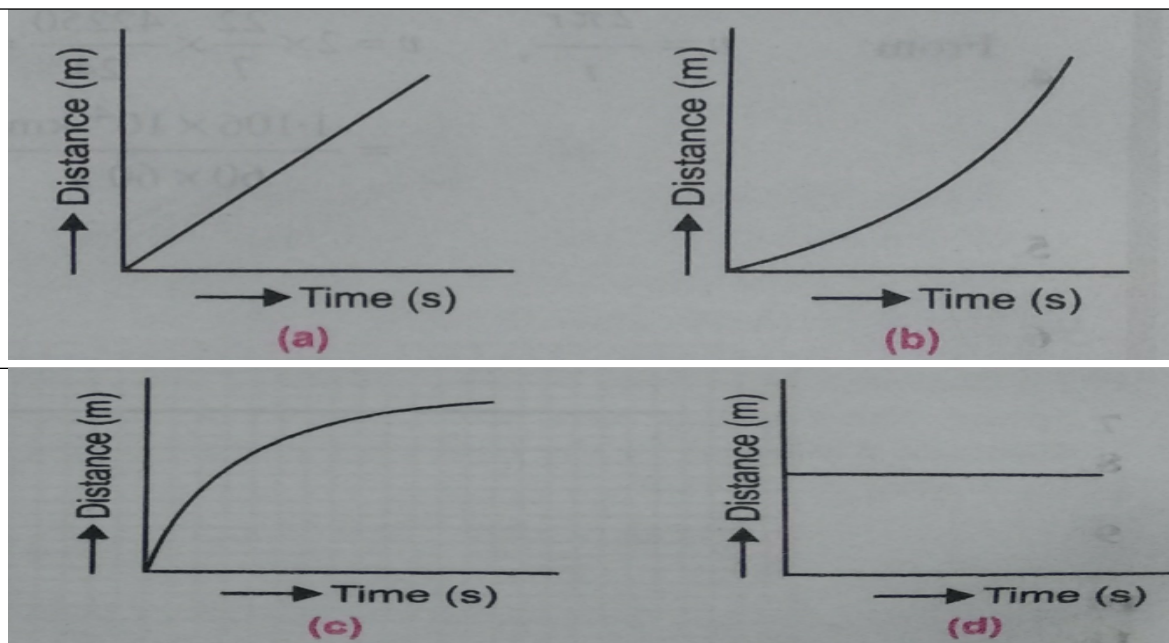
1X 5 =5

1. From the given v-t graph we can say that the object is :-

- (a) in uniform motion
- (b) at rest
- (c) in non uniform motion
- (d) moving with uniform acceleration.

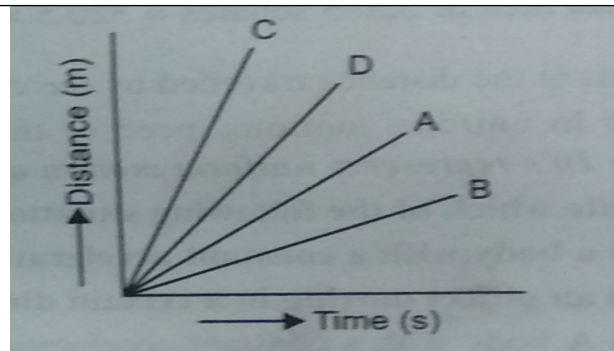


2. Which of the following figure represents uniform motion of a moving object correctly?



3. Four cars A, B, C and D are moving on a levelled road. Their distance versus time graphs are shown below. Choose the correct statement.

- (a) Car A is faster than Car D
- (b) Car B is slowest
- (c) Car D is faster than Car C
- (d) Car C is the slowest



4. Area under v-t graph represents a physical quantity which has the unit :-

- (a)  $m^2$ .
- (b) m.
- (c)  $m^3$ .
- (d)  $ms^{-1}$ .

5. Slope of a velocity - time graph gives :-

- (a) the distance.
- (b) the displacement.
- (c) the acceleration.
- (d) the speed

**SCETION :- II. : Objective Questions : Fill in the blanks 1 X 5 = 5**

- 6. In uniform circular motion ..... is constant but not the .....
- 7. The displacement can be ..... even when distance travelled is .....
- 8. Slope of v-t graph of a body represents ..... of the body.
- 9. The motion of second's hand of a watch is an example of .....
- 10. Negative acceleration is called .....

**SCETION :- III. : Short Answer Type Questions:- 2 X 3 = 6**

- 11. Differentiate between distance and displacement.
- 12. Differentiate between speed and velocity.
- 13. Define acceleration. Write its SI unit. Is it a scalar or a vector quantity. Draw v-t graph representing the motion of a body with uniform acceleration.

**SCETION :- IV : Long Answer Type Questions :- 1 X 4 = 4**

- 14. Prove the following equations of motion graphically.
- (a).  $v = u + at$ .
- (b).  $S = ut + \frac{1}{2} at^2$ .
- (c).  $V^2 = u^2 + 2aS$

Where,  $u$  = initial velocity.       $t$  = time interval       $S$  = displacement  
 $v$  = final velocity.       $a$  = constant acceleration.