Name of Student	Class	Subject	Board	Chapter
	9th	Physics	FB	02
Date :		Objective		Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

01	A body has translatory motion if it moves along a:						
a	Straight line	b	Circle	c	Line without rotation	d	Curved path
02	The motion of a body about an axis is called:						
a	Circular motion	b	Rotatory motion	c	Vibratory motion	d	Random motion
03	Which of the following is a vector quantity?						
a	Speed	b	Distance	c	Displacement	d	Power
04	If an object is moving with constant speed then its distance-time graph will be a straight line:						
a	Along time-axis	b	Along distance-axis	c	Parallel to time-axis	d	Inclined to time-axis
05	A straight line parallel to time-axis on distance-time graph tells that the object is:						
a	Moving with constant speed	b	At rest	c	Moving with variable speed	d	In motion
06	By dividing displacement of a moving body with time, we obtain:						
a	Speed	b	Acceleration	c	Velocity	d	Deceleration
07	A ball is thrown vertically upward. Its velocity at the highest point is:						
a	-10ms-1	b	Zero	c	10ms-2	d	None of these
08	A change in position is called:						
a	Speed	b	Velocity	c	Displacement	d	Distance
09	A train is moving at a speed of 36kmh-1. Its speed expressed in ms-1 is:						
a	10ms^{-1}	b	20ms^{-1}	c	25ms^{-1}	d	30ms^{-1}
10	A car starts from rest. It acquires a speed of 25ms-1 after 20 s. the distance moved by the car during this time is:						
a	31.25 m	b	250 m	c	500 m	d	5000 m
11	Straight line motion at a body is known as:						
a	Linear motion	b	Circular motion	c	Random motion	d	Rotatory motion
12	The rate of the displacement of a body is called:						
a	Velocity	b	Speed	c	Acceleration	d	Distance

Section - B

Q. No.1:- Attempt any eleven parts. The answer of each part should not exceed 3 to 4 lines.   (11×3=33).

01	Why vector quantities cannot be added and subtracted like scalar quantities?	02	Can a body moving at a constant speed have acceleration?
03	In the above problem, find the time taken by the train to stop after the application of brakes.	04	Difference between Scalars and vectors.
05	Difference between Linear and random motion.	06	Difference between speed and velocity.
07	Derive the first equation of motion for uniformly accelerated rectilinear motion.	08	Sketch a distance-time graph for a body moving with variable speed?
09	A train starts from rest with an acceleration of 0.5ms-2. Find its speed in kmh-1, when it has moved through 100m.	10	A car has a velocity of 10ms-1. It accelerates at 0.2ms-2 for half minute. Find the distance travelled during this time and the final velocity of the car.
11	Differentiate between positive and negative acceleration?	12	Describe translatory motion with the help of examples?
13	Define average speed.	14	Define acceleration?
15	What is the purpose of distance-time graph? How it is plotted?		

Q. No.4:- Attempt any TWO questions. All questions carry equal marks: (2×10=20)

Q. No.1:- (a).Explain translatory motion and give examples of various types of translatory motion.

(b).A cricket ball is hit vertically upwards and returns to ground 6 s later. Calculate:

A. maximum height reached by the ball.   B. Initial velocity of the ball

Q. No2:- (a).How are vector quantities important to us in our daily life?

(b).Prove that $2aS = V_f^2 - V_i^2$

Q. No.3:- (a).When a body is said to be at rest? Give an example of a body that is at rest and is in motion at the same time.

(b).A train starts from rest. It moves through 1 km in 100 s with uniform acceleration. What will be its speed at the end of 100 s?