



# THE PUNJAB SCHOOL

## DRC-JTC

Practice worksheet -1  
Self-Assessment-Summer 2020

Physics:-1

Class-IX

Marks: 50

**Q: 1 Encircle the correct option:**

**20x1=20**

i- A body has a translatory motion, if it moves in			
a) Straight line	b) Circular path	c) Straight without rotation	d) Zigzag
ii- Which of the following is a vector quantity?			
a) Speed	b) distance	c) displacement	d) power
iii- A ball thrown vertically upwards, its velocity at highest point is			
a) Zero	b) $-10 \text{ ms}^{-1}$	c) $10 \text{ ms}^{-1}$	d) None
iv- A body is moving with uniform speed, its acceleration will be			
a) $2 \text{ ms}^{-2}$	b) Zero	c) $5 \text{ ms}^{-2}$	d) None
v- A body is moving with variable speed, its graph would be			
a) Straight line	b) curved	c) circular	d) none
vi- A train is moving with the speed of $36 \text{ kmh}^{-1}$ . Its speed in $\text{ms}^{-1}$ is			
a) $10 \text{ ms}^{-1}$	b) $20 \text{ ms}^{-1}$	c) $25 \text{ ms}^{-1}$	d) $30 \text{ ms}^{-1}$
vii- A change in a position is called			
a) Distance	b) Displacement	c) Velocity	d) Acceleration
viii- A body rotating around its axis is said to be in			
a) Linear Motion	b) Rotatory Motion	c) Translatory Motion	d) None
ix- Value of g is			
a) $9.8 \text{ ms}^{-2}$	b) $98 \text{ ms}^{-2}$	c) $0.98 \text{ ms}^{-2}$	d) $0.098 \text{ ms}^{-2}$
x- A body at rest covers distance			
a) Zero	b) 1m	c) 0.1m	d) 0.001m
xi- Which state of the body is relative?			
a) Rest	b) Motion	c) Rest and motion	d) None
xii- Types of the motion are			
a) 2	b) 3	c) 4	d) 5
xiii- Which is not a type of motion?			
a) Translatory	b) Rotatory	c) Elastics	d) None
xiv- The distance covered in a unit time is called			
a) Speed	b) Velocity	c) Acceleration	d) None
xv- Negative acceleration is also called			
a) Ideal acceleration	b) Deceleration	c) Acceleration	d) None
xvi- Scalar quantity is completely described by its			

a) Magnitude	b) Direction	c) Both a and b	d) None
xvii- Which is a vector quantity?			
a) Speed	b) Volume	c) Energy	d) Momentum
xviii- Which is not an example of vector quantity?			
a) Work	b) Force	c) Momentum	d) Torque
xix- Gravitation acceleration is denoted by			
a) G	b) $G$	c) $g$	d) none
xx- Bodies falling down freely, $g$ will be			
a) positive	b) Negative	c) Zero	d) None

### Subjective Type

**Q:2 Answer the following any four short questions:** **/4x2=8**

- i. Define kinematics.
- ii. Differentiate between rest and motion with examples?
- iii. Differentiate between circular and rotatory motion with examples?
- iv. Elaborate scalar and vector quantities with examples?
- v. Represent 80 newton force acting North of East with given procedure?

**Q:3 Answer the following any three short questions:** **/3x2=6**

- i. What is meant by position vector?
- ii. Differentiate between uniform acceleration and variable acceleration with graph?
- iii. Can a scalar be added to vector quantity? Explain.
- iv. Differentiate between speed and velocity?

**Q:4 Answer the following any three short questions:** **/3x2=6**

- i. A car is moving with uniform velocity of  $10\text{ms}^{-1}$  for 10 seconds. Find the distance covered by the car.
- ii. Define gravitational acceleration.
- iii. Draw distance- time graph of a body moving with variable speed.
- iv. Define linear motion with example?

**Q:5 Answer the following long question.** **/10x1=10**

- i- Prove:  $S=V_{it}+\frac{1}{2}at^2$
- ii- A car is moving with the uniform speed of  $60\text{ms}^{-1}$  for 30 seconds. Find the distance travelled by the car.