# DEEP PUBLIC SCHOOL HOLIDAY HOMEWORK <br> SESSION-(2021-22) 

## SUBJECT-PHYSICS

## CLASS-IX

## MAKE A PROJECT RECORD AND WORKING MODEL OF PHYSICS (Any topic of your choice)

## Chapter: Motion

Q1: Given below are four options against each question. Choose the option which you consider the most appropriate as your answer:
(a) If the displacement of an object is proportional to square of time, then the object moves with:
(i) Uniform velocity
(ii) Uniform acceleration
(iii) Increasing acceleration
(iv) Decreasing acceleration
b) Which of the following can sometimes be 'zero' for a moving body?

1. Average velocity speed
2. Displacement
(i) Only (1)
(ii) (1) and (2)
(iii) (1) and (4)
(iv) Only (4)
(c) Which of the following statement is correct regarding velocity and speed of a moving body?
(i) Velocity of a moving body is always higher than its speed
(ii) Speed of a moving body is always higher than its velocity
(iii) Speed of a moving body is its velocity in a given direction
(iv) Velocity of a moving body is its speed in a given direction
d) A car is travelling at a speed of $90 \mathrm{~km} / \mathrm{h}$. Brakes are applied so as to produce a uniform acceleration of $-0.5 \mathrm{~m} / \mathrm{s} 2$. Find how far the car will go before it is brought to rest?
(i) 8100 m
(ii) 900 m
(iii) 625 m
(iv) 620 m
e) The numerical ratio of displacement to distance for a moving object is:
(i) Always less than 1
(ii) Equal to 1 or less than 1
(iii) Always more than 1
(iv) Equal to 1 or more than one

Q-2. Write difference between rest and motion?
Q-3. Write difference $b / w$ uniform and non uniform motion?
$\mathrm{Q}-4$. Write differences $\mathrm{b} / \mathrm{w}$ speed and velocity?
Q-5. What is uniform and non -uniform velocity?
Q-6. What is Acceleration? Explain uniform and Non -uniform Acceleration?
Q-7. Write the conditions of acceleration to be Positive, negative and zero?
Q-8.Under what condition(s) is the magnitude of average velocity of an object equal to its average speed?

DO NCERT EXERCISE OF MOTION TILL ACCELERATION TOPIC

