GSc. Class - VII

MOTION AND TIME

ASSIGNMENT No.28

SA-2

Q1. Define speed. State its S. I. unit.

Q2. Differentiate between uniform and non-uniform motion.

Q3. Describe a simple pendulum. Draw a diagram. What kind of motion does it show?

Q4. For a simple pendulum; define:-

a) One oscillation

b) Time period

c) Frequency

Q5. A truck travels a distance of 540 km in 4.5 hours. Calculate its speed.

Q6. The distance between two stations is 1995 km. How much time it will take to cover this distance at an average speed of 19 km/h?

Q7. A car takes 20 minutes to cover a distance of 15 km. Calculate its speed in km/h.

Q8. Plot the distance – time graph from the following data also find the speed using the graph . Calculate the distance travelled in 4.5s.

TIME (s)	0	1	2	3	4	5
DISTANCE (m)	0	10	20	30	40	50

Q9. Name the following:

1. The watches and clocks used nowadays which have an electric circuit.

2. The scientist who found that, a pendulum of a given length takes the same time to complete one oscillation.

3. The clocks that were used to measure time, before the pendulum clock became popular.

Q10. Fill in the blanks:

1. One microsecond is _____ of a second.

2. One nanosecond is _____ of a second.

3. _____ of objects helps us to decide which one is moving faster than the other.

4. The speed of a vehicle is measured with a device called _____.

5. _____ measures the distance moved by the vehicle.

6. All clocks are based on _____ events.

7. _____ is used to measure short intervals of time.

8. 36 km/h is same as _____ m/s.

9. The slope of a distance-time graph represents _____.

10. The distance-time graph for the motion of an object with a constant speed is a _____ line.

Q11. Choose the correct option:

1. A repetitive motion which takes place at equal intervals of time is called:

a) random motion b) rectilinear motion c) curvilinear motion d) periodic motion

2. Time period of a pendulum does not depend upon:

a) mass of the bob b)size of the bob c) amplitude d) all of these

3. While plotting a graph one must take care to plot:

a) The independent quantity on Y-axis b) The independent quantity on X-axis

c) The dependent quantity on X-axis d) None of these

4. If the distance-time graph is a curved line:

a) A non-uniform speed is maintained by the object

b) The object covers unequal distances in equal intervals of time

c) Both a) and b) d) None of these

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