CLASS VI – SCIENCE – CHAPTER 10

MOTION AND MEASUREMENT OF DISTANCES

Name: Date:

01. The movement of earth around the sun is an example of

(a). Circular motion (b). Periodic motion (c). Oscillatory motion (d). Translatory motion

02. The standard unit of length in SI system is

(a). Yard (b). Foot (c). Metre (d). Centimeter

03. What device should a tailor use to measure the length of cloth?

(a). Measuring rod (b). Measuring tape (c). Scale (d). String

04. One cm is equal to

(a). 10 mm (b). 1 km (c). 1000 m (d). 1 m

05. The distance between Delhi and Kanpur is usually expressed in

(a). Metre (b). Centimeter (c). Kilometer (d). Hectometer

06. Which of the following does not represent a time-interval?

(a). A day (b). A minute (c). A second (d). Time of sunrise.

07. One kilometer is equal to

(a). 100 m (b). 1000 m (c). 10 m (d). 1000 cm

08. Hectare is the unit of

(a). Length (b). Mass (c). Area (d). Volume

09. Which one is not a/ an ancient unit of measurement?

(a). Feet (b). Cubit (c). Angul (d). Meter

10. Change in position of a body with time is called

(a). Distance (b). Motion (c). Displacement (d). Speed

11. Ten millimeter is equal to

(a). 1 cm (b). 100 cm (c). 10 m (d). 10 dm

12. A moving swing has

(a). Rectilinear motion (b). Non periodic motion (c). Circular motion (d). Rotational motion

13. What kind of motion a bullet shows when fired from a gun?

(a). Linear motion (b). Translatory motion (c). Random motion (d). Non-periodic motion.

14. To and fro movement of body is termed as

(a). Periodic motion (b). Vibratory motion

(c). Oscillatory motion (d). Circular and periodic motion.

15. When the motion of the object is not along a fixed path with changing direction

(a). Random motion (b). Periodic motion (c). Oscillatory motion (d). Circular motion.

Q01. Match the following columns

A.

Column A	**Column B**
(a). Length of a rod	i. Vernier calipers
(b). Metre	ii. Length
(c). Small thickness	iii. Unit of length
(d). Area of surface is measured in	iv. Square metre
(e). Distance between two points	v. metre

B.

Column A	**Column B**
(a). Liters	i. Length of pencil
(b). Kilometer	ii. Area of large playground
(c). Kilogram	iii. Milk in bucket
(d). Hectare	iv. Mass of sugar
(e). Centimeter	v. Distance between Delhi and Agra

C.

Column A	**Column B**
(a). One meter	i. Twelve inch
(b). One kilometer	ii. 1000 Sq. meter
(c). One liter	iii. 100 cm
(d). One hectare	iv. 1000 ml
(e). One feet	v. 1000 m

D.

Column A	**Column B**
(a). Rectilinear motion	i. Pendulum of clock
(b). Circular motion	ii. Needle of sewing machine
(c). Periodic motion	iii. Swing
(d). Circular and periodic	iv. Car moving on straight roa(d).
(e). Oscillatory motion	v. earth around sun.

Q02. Fill in the blanks.

(a). The standard unit of length is ----------.

(b). The motion described by a simple pendulum is ---------- motion.

(c). Length more than one thousand meters are measured in ----------.

(d). Motion of a car on straight road is ---------- motion.

(e). Hectare is the unit of ----------.

(f). A body repeating its motion after fixed interval of time is in ---------- motion.

(g). In rectilinear motion, object moves on a ---------- line.

(h). S. I. unit of mass is ----------.

(i). Motion of an object around a fixed point is known as ---------- motion,

(j). Rotation of earth around the sun is ---------- motion.

Q03. Write T for true and F for false statements.

(a). Motion in straight line is called rectilinear motion.

(b). One centimeter is equal to 100 millimeter.

(c). Thread can be used to measure the length of curved line.

(d). Diameter of a circle is half it radius.

(e). Motion of needle of sewing machine is circular motion.

(f). Each meter is divided into 100 equal divisions called centimeter.

(g). One kilometer is equal to 1000 cm.

(h). Invention of wheel made great change in mode of transport.

(i). Hand span was used as unit for measurement of length.

(j). Change in position of body with time is called distance.

Q04. Define periodic motion? Give one example.

Q05. What is the S. I. unit of length and what is their symbol?

Q06. What is different between periodic and non-periodic motion. Give example.

Q07. Classify the following motion as uniform motion, non-uniform motion and oscillatory motion.
Car moving with constant speed, Bus moving on city road, rotation of earth, riding of cycle in crowded road, pendulum of clock, a swing.

Q08. What is unit? Write S.I. unit of mass.

Q09. How periodic motion is different from circular motion?

Q10. Three students measured the length of same wall. The results of these students are different. What might be the possible reasons?

Q11. Saina and Megha are friends. They were riding on their bicycle. Saina said that motion of wheel of cycle is rectilinear but Megha argued that motion of cycle wheel is circular. How was correct? Why?

Q12. Why can feet-step not be used as standard unit of length?

Q13. Arrange the following in increasing order of magnitude.
(a). 1m (b). 1 cm (c). 1 dm (d). 1 cm e. 1 mm.

Q14. While measuring the length of table top, reading of scale at one end is 2 cm and reading at other end of scale is 32.5 cm. find the length of table top?

Q15. Height of a person is 1.75 m. express his height in cm and mm.

Q16. Why motion is always relative to reference point.

Q17. What precaution must be taken during measuring a length?

Q18. Why S.I. Unit is necessary for various quantities?

Q19. While travelling in a train, it appears that the trees near the track are moving whereas co-passengers appear to be stationary. Explain the reason.

Q20. How are the motions of a wheel of a moving bicycle and a mark on the blade of a moving electric fan different? Explain.

Q21. Three students measured the length of a corridor and reported their measurements. The values of their measurements were different. What could be the reason for difference in their measurements? (Mention any three)

Q22. Boojho was riding in his bicycle along a straight roa(d). He classified the motion of various parts of the bicycle as

(a). rectilinear motion,

(b). circular motion and

(c). both rectilinear as well as circular motion.

Can you list one part of the bicycle for each type of motion? Support your answer with reason.

Q23. Write one example for each of the following type of motion.

(a) Rectilinear (b) Circular (c) Periodic (d) Circular and periodic