

Class: VI
Subject: Physics
Topic: Motion and measurement of distance
No. of Questions: 21

1. Name one object that shows multiple motions?

Ans: The Earth - Rotatory and translator motion
Drilling - Rotatory and downward translator motion
A ball moving along the ground- Rotatory and Rectilinear motion

2. How will you measure length in SI system?

Ans: Using meter scale

3. What is the quantity that can be measured?

Ans: Physical quantity like mass, length and Time

4. What type of motion body moves as a whole?

Ans: Translatory motion

5. Which kind of motion produce sound?

Ans: Vibratory motion

6. What types of motion is noticed in the pendulum of clock and swing?

Ans: Oscillatory motion and periodic

7. Falling of apple from tree is what types of motion?

Ans: Rectilinear motion.

8. Discovery of what made transport easy?

Ans: Wheel

9. Motion in which the distance from the axis remain same?

Ans: Circular motion

10. To and fro motion of a body about a fix point is example of what type of motion?

Ans: Oscillatory

11. What is motion?

Ans: The change in the position of an object with time is called motion.

12. What is the S.I unit of length?

Ans: The S.I unit of length is metre which is written as 'm'.

13. What is measurement?

Ans: The comparison of an unknown quantity with a standard known quantity is known as measurement.

14. What is unit?

Ans: A quantity adopted as a standard of measurements of a physical quantity is called a unit.

15. While measuring the length of a knitting needle, the reading of the scale at one end is 3.0 cm and on the other end is 33.1 cm. What is the length of needle?

Ans: The length of the needle = $(33.1 - 3.0)$ cm = 30.1 cm

16. Describe at least three rules of measuring length correctly.

Ans:

- The scale that you are using to measure the object must be greater than the length of the object.
- The eye should be placed just above the points that you are reading otherwise there will be error due to parallax.
- If the zero mark of the scale is damaged or edge of scale is not smooth, then start measuring from another mark.

17. Name two devices used to measure length.

Ans: The two devices that can be used to measure length are:-Metre scale and Screw gauge.

18. Describe the correct method of measurement of length.

Ans: (i) we must choose a suitable device for measuring the length of an object, like measuring scale
(ii) we should place the scale in contact with an object along its length and align the zero mark of the scale with the starting position of the object.

(iii) While taking the reading, eye must be placed vertically above the point where the measurements have to be taken; otherwise there will be an error in the reading which is taken due to parallax.

(iv) If the zero mark on the scale is damaged, then start the measurement from another mark.

19. Circle odd one

(a) Table; fan; falling stone; Parked car

(b) Bee; butterfly; Grazing Cow; Sleepy Donkey

(c) Pendulum; Earth revolving around the Sun; Moon revolving around the earth; Bee revolving on flowers

(d) Moving fan; merry go round; A bus moving on road; a stone moving along circular track

Ans: (a) falling stone (b) Sleepy Donkey (c) Bee revolving on flowers (d) A bus moving on road

20. Fill in the blanks

1. One meter is -----cm

2. one centimeter is -----mm

3. Four km is -----m

4. The motion of moving bicycle is -----

5. The motion of drill machine is -----

6. Motion of child on swing -----

7. The motion of a top is -----

Ans: 1. 100 2. 10 3. 4000 4. Rectilinear 5. Rotatory 6. Oscillatory
7. rotatory

21. Say true or false
- (a) Rectilinear and curvilinear cannot happen at the same time
 - (b) Rupa can move in rectilinear and rotary motion at the same time
 - (c) A child on swing has only circular motion
 - (d) Periodic motion is always rectilinear
 - (e) A foot step is used as a standard unit of length.

Ans: (a) False (b) True (c) False (d) False (e) False

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