

Class: 7
Subject: physics
Topic: Motion And Time
No. of Questions: 20
Duration: 60 Min
Maximum Marks: 60

1. Which of the following instrument measures time with the most accuracy?
- Sun dial
 - Sand clock
 - Quartz clock
 - Mechanical clock with gears

Ans. c

2. The basic unit of speed is:
- Km/min
 - m/min
 - km/h
 - m/s

Ans. d

3. A faster moving object covers:
- less distance in more time
 - more distance in more time
 - less distance in shorter time
 - more distance in shorter time

Ans. d

4. 36 km/hr can also be expressed as:
- 10m/s
 - 3.6m/s
 - 100m/s
 - 36m/s

Ans. a

5. If an object moving along a straight line, keeps changing its speed, then
- The motion is said to be a uniform motion
 - The motion is said to be a non-uniform motion
 - The object is said to be stationary
 - The motion is said to be a fast motion

Ans. b

6. The motion that repeats itself after regular intervals of time can be__
(find the incorrect option)
- To and fro motion
 - Circular motion
 - Rectilinear motion
 - Periodic motion

Ans. c

7. The metallic ball in a pendulum is called as
- Gong
 - Fork
 - Rod
 - Bob

Ans. d

8. Which of the following relations is correct?
- Speed = distance x time
 - Speed = distance ÷ time
 - Speed = time ÷ distance
 - Speed = 1/(distance x time)

Ans. b

9. Which of the following is a scalar quantity?
- Distance
 - Displacement
 - Velocity
 - Force

Ans. d

10. The meter that is used to measure the distance moved by the vehicle is known as_____
- Speedometer
 - Odometer
 - Chronometer
 - Ammeter

Ans. b

11. What are the points that should be kept in mind while choosing scale for drawing a graph?
- The difference between the highest and the lowest values of each quantity.
 - The intermediate values of each quantity to mark the values on the graph.
 - To utilize the maximum part of the paper on which graph is to be drawn.
 - All of the above

Ans. d

12. A simple pendulum takes 15 seconds to complete 5 oscillations. What is the time period of the pendulum?
- 15 Sec
 - 5 Sec
 - 3 Sec
 - 45 Sec

Ans. c (Time taken in one oscillation = $15/5 = 3$ Sec.)

13. Sunila covers a distance of 2.4 km from her house to reach her school on a bicycle. If the bicycle has a speed of 2 m/sec, calculate the time taken by her to reach the school
- 600 S
 - 1200 S
 - 2400 S
 - 3600 S

Ans. b

14. A bus covers a distance from A to B at 40 km/h and while returning it travels at 50 km/h. calculate the average speed.
- 5 m/s
 - 7.5 m/s
 - 10 m/s
 - 12.5 m/s

Ans. d

15. The odometer of a car reads 57321.0 km when the clock shows the time 08:30 AM. If at 08:50 AM, the odometer reading has changed to 57336.0 km, Calculate the speed of the car in km/hr during this time.
- 45 km/hr
 - 90 km/hr
 - 22.5 km/hr
 - 15 km/hr

Ans. a

Time taken = 20 min = $20/60$ hr = $1/3$ hr

Distance travelled = 15 km

So, speed = Distance/time = 45 km/hr

16. Salma takes 15 minutes from her house to reach her school on a bicycle. If the bicycle has a speed of 2 m/s, calculate the distance between her house and the school.
- 1.8 km
 - 3.6 km
 - 18 km
 - 36 km

Ans. a

17. The distance between two stations is 240 km. A train takes 6 hours to cover this distance. Calculate the speed of the train
- 10 km/h
 - 20 km/h
 - 30 km/h
 - 40 km/h

Ans. d

18. If a car is moving with a speed of 5 km/h on a highway find the distance travelled by the car in 3 hours?

- a. 1.5 km
- b. 1500 m
- c. 150 m
- d. 15000 m

Ans. d

19. A car is moving with speed 72 km/hr. Convert this speed into metre/sec

- a. 10 m/s
- b. 20 m/s
- c. 30 m/s
- d. 40 m/s

Ans. b

20. Which motion is not oscillatory?

- a. Motion of your hands while running.
- b. Motion of a child on a see-saw.
- c. Motion of the hammer of an electric bell
- d. Rotation of the Earth.

Ans. d