Motion and Time

Question 1.
The speed of a car is 40 km/h. What is time taken to reach from one city to another city if the distance between the two cities is 480 km:
(a) 10 hours
(b) 11 hours
(c) 14 hours
(d) 12 hours

▼ Answer

(d) 12 hours
The time is taken by a car is 12 hours.

Question 2.
72 km/h m/s:
(a) 72 m/s
(b) 20 m/s
(c) 36 m/s
(d) 12 m/s

▼ Answer

(b) 20 m/s
72 km/h – 20m/s

Question 3.
The standard unit of time is:
(a) hour
(b) minute
(c) second
(d) all of these

▼ Answer

(c) second
The standard unit of time is second.

Question 4.
The clock used now a days are:
(a) quartz
(b) minute
(c) second
(d) all of these

▼ Answer

(a) quartz
The quartz clock is used now-a-days.

Question 5.
When weight of bob in a pendulum is increased then the oscillation period of a pendulum is:
(a) increased
(b) decreased
(c) no change
(d) can't say

▼ Answer

(b) decreased
When weight of bob in pendulum is increased, the oscillation period of pendulum is decreased.

Question 6.
The standard unit of length is:
(a) metre ('m')
(b) kilometre
(c) m/s
(d) km/h

▼ Answer

(a) metre ('m')
The standard unit of length is meter ('m').

Question 7.
The standard unit of mass is:
(a) 'kg'
(b) mg
(c) g
(d) none of these

▼ Answer

(a) 'kg'
('Kg') is the unit of mass.

Question 8.
The standard unit of temperature is:
(a) 'Kg'
(b) F
(c) °C
(d) can't say

▼ Answer

(a) 'Kg'
('K') is the unit of temperature.

Question 9.
Distance:
(a) D = S x T
(b) D =
(c) D =
(d) D =

▼ Answer

(a) D = S x T
D = S x T

Question 10.
Time:
(a) t = d x s
(b) t =
(c) t =
(d) t =

▼ Answer

(c) t =
t =

Question 11.
The distance moved by the object in a unit time is:
(a) time
(b) distance
(c) speed
(d) can’t say

▼ Answer

(c) speed
The distance moved by the object in a unit time is speed.

Question 12.
The pictorial representation of two variables inter dependent of one another is known as:
(a) motion
(b) graph
(c) speed
(d) time

▼ Answer

(b) graph
Graph is pictorial representation of two objects.

Question 13.
If an object covers equal distance in equal intervals of time, then the object is said to have:
(a) non-uniform motion
(b) uniform motion
(c) oscillation
(d) none of these

▼ Answer

(b) uniform motion
A staight line covers equal distance in equal intervals of time is uniform motion.

Question 14.
A device used to measure the speed of vehicles is:
(a) odometer
(b) graph
(c) speedometer
(d) none of these

▼ Answer

(c) speedometer
Speedometer measure the speed of vehicles.

Question 15.
The to and fro motion of the particle about its mean position is called:
(a) intervals
(b) vibration
(c) pendulum
(d) can’t say

▼ Answer

(b) vibration
To and fro motion is vibration.

Question 16.
The most common example of periodic motion or oscillatory motion is:
(a) interval
(b) pendulum
(c) simple pendulum
(d) speedometer

▼ Answer

(c) simple pendulum
Simple pendulum is periodic or oscillatory motion.

Question 17.
The time interval between one sunrise and next sunrise is called a:

(a) year
(b) month
(c) day
(d) week

▼ Answer

(c) day
The time interval between one sunrise to next sunrise is a day.

Question 18.
Which of the following motion is circular motion:
(a) motion of a child over see saw
(b) motion of a car running on a straight road
(c) motion of an electric bell hammer
(d) motion of a child in a merry go round

▼ Answer

(d) motion of a child in a merry go round
A child in a merry-go-round is circular motion.

Question 19.
A simple pendulum takes 32 S complete 20 oscillations. What is the time period of pendulum:
(a) 640
(b) 0.625
(c) 1.60
(d) none of these

▼ Answer

(b) 0.625
The time period of pendulum is 0.625.

Question 20.
Distance between two cities is measured in:
(a) metres
(b) kilometres
(c) second
(d) kilogram

▼ Answer

(b) kilometres
Distance between two cities is measrued by kilometers.

Question 21.
Motion of a train on a straight
(a) oscillatory motion
(b) circular motion

(c) uniform motion
(d) straight line motion

▼ Answer

(d) straight line motion
A train on a straight bridge is straight line motion.

Question 22.
A device used to measure the distance moved by a vehicle:
(a) odometer
(b) speedometer
(c) both
(d) none of these

▼ Answer

(a) odometer
An odometer measured the distance moved by a vehicle.

Question 23.
The time taken by the earth to make one revolution around the sun is called a:
(a) day
(b) week
(c) month
(d) year

▼ Answer

(d) year
The earth make one revolution around the sun in a year.

Question 24.
The motion of a vibrating particle from one extreme position to another extreme position about its mean position is:
(a) speed
(b) circulation
(c) oscillation
(d) none of these

▼ Answer

(c) oscillation
The motion of vibrating particle is circulation.

Question 25.
The time taken by a vibrating body to complete one vibration is:
(a) speed
(b) time of period

(c) distance
(d) all of these

▼ Answer

(b) time of period
The time taken by a vibrating body to complete one vibration is time period.

Question 26.
A horse pulling a cart has:
(a) oscillatory motion
(b) circular motion
(c) linear motion
(d) none of these

▼ Answer

(a) oscillatory motion
A horse pulling a cart has oscillatory motions.

Question 27.
If the speed of a body moving in a straight line changes then the speed of the body is:
(a) uniform
(b) non-uniform
(c) some times uniform and non-uniform
(d) none of these

▼ Answer

(b) non-uniform
If the speed of a body moving in a straight line changes then the speed of the body is non-uniform.

Question 28.
An earth completes one revolution around the sun in:
(a) 1 day
(b) 1 year
(c) 1 hour
(d) none of these

▼ Answer

(b) 1 year
An earth complete one revolution around the sun in a year.

Question 29.
A simple pendulum is an example of:
(a) periodic motion
(b) circular motion

(c) linear motion
(d) none of these

▼ Answer

(a) periodic motion
Periodic motion is an example of a simple pendulum.

Question 30.
An odometer is used to measure:
(a) speed
(b) distance
(c) motion
(d) none of these

▼ Answer

(b) distance
Distance is measured by an odometer.

Question 31.
The hammer of an electric bell has motion:
(a) circular motion
(b) vibratory motion
(c) linear motion
(d) periodic motion

▼ Answer

(b) vibratory motion
The hammer of an electric bell has vibratory motion.

Question 32.
The unit of speed of train is:
(a) meter per hour
(b) meter per second
(c) kilometer per hour
(d) mile per second

▼ Answer

(c) kilometer per hour
The unit of speed of train is kilometer per hour.

Question 33.
The times taken by a pendulum to complete one oscillation is:
(a) oscillation period
(b) 1 second
(c) time period
(d) frequency

▼ Answer

(c) time period
The time taken by a pendulum to complete one oscillation is time period.

Question 34.
The correct relation for speed is:

$$\text{(a) speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{(b) speed} = \frac{\text{time}}{\text{distance}}$$

$$\text{(c) speed} = \text{distance} \times \text{time}$$

$$\text{(d) speed} = \frac{1}{\text{distance} \times \text{time}}$$

▼ Answer

$$\text{(a) speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

Question 35.
The speed of a train is 60 km/h. The distance covered by the train is 4 hours would be:
(a) 15 km
(b) 240 km
(c) km
(d) none of these

▼ Answer

(b) 240 km
The distance covered by a train would be 240 km.

Question 36.
Classify the following as motions is oscillatory motion:
(a) motion of your hands while runnning
(b) motion of a horse pulling a cart on a straight road
(c) motion of a child in a merry go round
(d) motion of a train on a straight line

▼ Answer

(a) motion of your hands while runnning
Motion your hands while running is oscillatory motion.

Question 37.
Which of the following is correct statements:
(a) the basic unit of time is second
(b) every object moves with a constant speed
(c) distance between two cities is measured in metres
(d) the time period of a given pendulum is not constant

▼ Answer

(a) the basic unit of time is second
The basic unit of time is second.

Question 38.
The graph between distance, time for a body at rest is a:
(a) straight line parallel to a distance axis
(b) straight line parallel to time axis
(c) curve line
(d) straight line

▼ Answer

(b) straight line parallel to time axis
Straight line parallel to time axis.

Question 39.
A car covers a distance of 220 km in 4 hours what is its speed:
(a) 50 km/h
(b) 55 km/h
(c) 224 km/h
(d) 880 km/h

▼ Answer

(b) 55 km/h
The speed of a car is 55 km/h.

Question 40.
The graph between distance and time for a non uniform motion is a:
(a) curve line
(b) can’t say
(c) straight line
(d) none of these

▼ Answer

(a) curve line
The graph between distance and time is curve line for non¬uniform motion.

Question 41.
A car covers 40 km in first hour, 115 km in next two hours and 45 km in next one hours. Find

out its averages speed:
(a) 100 km/h
(b) 66.6 km/h
(c) 50 km/h
(d) none of these

▼ Answer

(c) 50 km/h
The total averages speed of a car is 50 km/h.

Question 42.
The S.I. unit of speed is:
(a) m/s
(b) km/min
(c) km/h
(d) km/s

▼ Answer

(a) m/s
The S.I. unit of speed is m/s.

Match the column A with column B:

Question 1.

Column-A	Column-B
(a) Merry go round	(i) straight line
(b) Over see-saw	(ii) circular motion
(c) Your hands while running	(iii) linear motion
(d) Train on a straight line	(iv) oscillatory motion
(e) Horse pulling a cart	(v) oscillatory motion

▼ Answer

Column-A	Column-B
(a) Merry go round	(ii) circular motion
(b) Over see-saw	(iv) oscillatory motion
(c) Your hands while running	(v) oscillatory motion
(d) Train on a straight line	(i) straight line
(e) Horse pulling a cart	(iii) linear motion

Question 2.

Column-A	Column-B
(a) 365 days	(i) 1 millennium = 1000 years
(b) 10 years	(ii) 1 century = 100 years
(c) 10 decades	(iii) 1 decade
(d) 10 centuries	(iv) 1 year

▼ Answer

Column-A	Column-B
(a) 365 days	(iv) 1 year
(b) 10 years	(iii) 1 decade
(c) 10 decades	(ii) 1 century = 100 years
(d) 10 centuries	(i) 1 millennium = 1000 years

State the following statements are True or False:

Question 1.
The basic unit of time is second.

▼ Answer

True

Question 2.
Every object moves with a constant speed.

▼ Answer

False

Question 3.
The time period of a given pendulum is not constant.

▼ Answer

True

Question 4.
The speed of a train is expressed in m/h.

▼ Answer

False

Question 5.
Distance between two cities is measrued in kilometers.

▼ Answer

True

Question 6.
Motion of your hands while running is oscillatory motion.

▼ Answer

True

Question 7.
A simple pedulum is an example of linear motion.

▼ Answer

False

Question 8.
A speedometer is used to measure distance.

▼ Answer

False

Question 9.
Minute is the basic unit of time.

▼ Answer

False

Question 10.
Second is the larger unit of time.

▼ Answer

False

Question 11.
Working of clock depends on periodic motion.

▼ Answer

True

Question 12.
When an object covers equal distances in equal intervals of time, however small be the intervals, then we say that it is in uniform motion.

▼ Answer

True

Fill in the blanks:

Question 1.
The motion of vehicles on a straight road is in ……

▼ Answer

straight line

Question 2.
Revolving of earth around the sun is …… motion.

▼ Answer

uniform motion

Question 3.
Running athlete is the example of …… motion.

▼ Answer

non-uniform motion

Question 4.
The weight should swing freely on being moved some distance to one side and released is ……

▼ Answer

oscillation

Question 5.
The time taken by a pendulum to complete an oscillation is called the period of ……

▼ Answer

oscillation

Question 6.
On increasing the length of the pendulum the oscillation period also ……

▼ Answer

increases

Question 7.
…… measures the distance moved by vehicle.

▼ Answer

odometer

Question 8.
…… records speed directly in km/h.

▼ Answer

speedometer

Question 9.
A horse pulling a cart has ……

▼ Answer

linear motions

Question 10.
…… is metallic ball of a pendulum.

▼ Answer

Bob of pendulum

Question 11.
The basic unit of speed is ……

▼ Answer

m/s

Question 12.
Speed = ……

▼ Answer

distance lime
