

UNIT-2**MULTIPLE CHOICE QUESTIONS****BOOK- MCQs**

1. Scalar Quantities have and suitable unit.
a) **magnitude** b) direction c) both a and b
2. Vector quantities have along with magnitude and unit.
a) Magnitude b) direction **c) both a and b**
3. Which one is a vector quantity
a) Mass **b) Weight** c) time
4. Which one is a scalar Quantity.....
a) time b) Force c) Velocity
5. Distance is aquantity.
a) Vector **b) Scalar** c) both a and b
6. What is SI unit of acceleration
a) ms^{-1} **b) ms^{-2}** c) nm
7. What is a SI Unit of Velocity.....
a) Nm **b) ms^{-1}** c) ms^{-2}
8. Shortest distance between two points is called
a) distance b) speed **c) displacement**

UNIT-2**EXAMS PRACTICE
MULTIPLE CHOICE QUESTIONS**

1. The motion of a body about an axis is called:
a). Random motion b). **Rotatory motion**
c). Vibratory motion d). Circular motion
2. The straight line motion of a body is called:
a. Random motion b). Translator motion
c). Vibratory motion **d). Linear motion**
3. The motion of a pendulum of a clock is:
a). Linear motion b). Rotatory motion
c). Random motion **d) Vibratory motion**

- 4 The motion of a steering wheel is:
a). Vibratory motion
c). Linear motion
b). Random motion
d) **Rotatory motion**
- 5 Brownian motion is:
a) Vibratory motion
c. Random motion
b). Linear motion
d) Circular motion
- 6 The motion of Earth about its axis is called:
a). **Rotatory motion**
c). Random motion
b) Circular motion
d) vibratory motion
- 7 Which of the following is a vector quantity?
a. work
c). Power
b). **velocity**
d) Distance
- 8 Which of the following is a scalar quantity?
a). Displacement
c) Power
b). force
d) acceleration
- 9 A ball is thrown vertically upward. Its velocity at the highest point will be:
a) **Zero**
c. 9.8 ms^{-1}
b). -9.8 ms^{-1}
d) 19.6 ms^{-1}
- 10 A train is moving at a speed of 36 kmh^{-1} . Its speed expressed in ms^{-1} is:
a) 20 ms^{-1}
c). 25 ms^{-1}
b). 5 ms^{-1}
d) **10 ms^{-1}**
- 11 A car, starts from rest and attain a velocity of 25 ms^{-1} in 10 seconds, the acceleration of car will be:
a). **2.5 ms^{-2}**
c). 3.0 m^{-2}
b). 1.5 ms^{-2}
d) 2.0 ms^{-2}
- 12 American athlete Noah Lyles in Paris Olympics 2024 completes its 100 metre race in 9.79 s, its average speed will be:
a). 8.348 ms^{-1}
c. 10.214 ms^{-1}
b). 12.347 ms^{-1}
d) 7.845 ms^{-1}
- 13 The SI unit of speed is:
a). ms^2
c). ms
b). **ms^{-1}**
d) ms^{-2}
- 14 The SI unit of acceleration is:
a). ms^2
c). ms
b) ms^{-1}
d) **ms^{-2}**

- 15 The area under the speed-time graph represents:
- a). Time
 - b) **Distance**
 - c) Velocity
 - d) Speed
- 16 If an object moves with a constant velocity of 10 m/s for 5 seconds, how far does it travel
- a) 2 m
 - b) 15 m
 - c) **50 m**
 - d) 5 m
- 17 An object moves with a constant velocity. Which statement is true
- a) Its velocity is changing
 - b) **Its acceleration is zero**
 - c) Its speed is changing
 - d) Its displacement is zero
- 18 A car accelerates uniformly from rest at a rate of 2 m/s^2 . How long will it take to reach a speed of 20 m/s
- a) 20 s
 - b) 5 s
 - c) 40 s
 - d) **10 s**
- 19 A stone is dropped from a height of 19.6 meters. How long does it take to reach the ground? (Assume no air resistance)
- a) 5 s
 - b) 25 s
 - c) **2 s**
 - d) 10 s
- 20 Which of the following is a unit of displacement
- a) Meter per second
 - b) **Meter**
 - c) Meter per second squared
 - d) Meter squared
- 21 A car accelerates uniformly from rest at 2.5 m/s^2 . What is its velocity after 8 s
- a) **20 m/s**
 - b) 10m/s
 - c) 15m/s
 - d) 5m/s
- 22 Which of the following statements is true about the acceleration of an object in free fall
- a) **It is constant**
 - b) It is zero
 - c) It is decreasing
 - d) It is increasing
- 23 The shortest distance between two points is known as:
- a) Velocity
 - b) **Displacement**
 - c) Speed
 - d) Distance
- 24 If velocity of a body changes equally in equal intervals of time then its acceleration will be:
- a) **Uniform**
 - b) Variable
 - c) Constant
 - d) Relative
- 25 The velocity and acceleration of a body moving with uniform speed in a circular path will be:
- a) In the same direction
 - b) **Mutually perpendicular**
 - c) In the opposite direction
 - d) velocity and acceleration are equal