

Batch: Genesis 8th

Sub: Physics

Assignment – Motions

Ass.Code: 21011101

- 1. Differentiate between scalar and vector quantities, giving two examples of each.
- 2. State whether the following quantity is a scalar or vector?
 - (a) Pressure
- (b) Force
- (c) Momentum
- (d) Energy
- (e) Weight
- (f) Speed.

- 3. When is a body said to be at rest?
- 4. When is body said to be in motion?
- 5. What do you mean by motion in one direction?
- 6. Define displacement. State its unit.
- 7. Differentiate between distance and displacement.
- 8. Can displacement be zero even if distance is not zero? Give one example to explain your answer.
- 9. When is the magnitude of displacement equal to the distance?
- 10. Define velocity. State its unit.
- 11. Define speed. What is its S.I. unit?
- 12. Distinguish between speed and velocity.
- 13. Which quantity, speed or velocity gives the direction of motion of a body?]
- 14. When is the instantaneous speed same as the average speed?
- 15. Distinguish between uniform velocity and variable velocity.
- 16. Distinguish between average speed and average velocity.
- 17. Give an example of motion of a body moving with a constant speed, but with a variable velocity. Draw a diagram to represent such a motion.
- 18. Given an example of motion in which average speed is not zero, but average velocity is zero.
- 19. Define acceleration. State its S.I. unit.
- 20. Distinguish between acceleration and retardation.
- 21. Differentiate between uniform acceleration and variable acceleration.
- 22. What is meant by the term retardation? Name its S.I. unit.
- 23. Which of the quantity, velocity or acceleration determines the direction of motion?
- 24. Give one example of each of the following:
 - (a) Uniform velocity
 - (b) Variable velocity
 - (c) Variable acceleration
 - (d) Uniform retardation.

25. The diagram below shows the pattern of the oil on the road, dripping at a constant rate from a moving car. What information's do you get from it about the motion of the car?



