

# Physics

Class: IX

## Chapter 1: Physical quantities and their measurement

### **Cognitive (Mark-1):**

1. What do you mean by quantity? 2. What do you mean by dimension? 3. What is vernier constant? 4. Write down the difference between fundamental and derived quantities. 5. Write down the name of fundamental quantities and their units. 6. Why unit is required to express the amount of a quantity? 7. What is called pitch. 8. What is the least count?

## Chapter 2: Motion

### **Cognitive (Mark-1):**

1. What is vector quantity? 2. What is displacement? 3. What is acceleration? 4. What is retardation? 5. What is uniform acceleration? 6. What is called vibratory motion? 7. What is called periodic motion? 8. What is called absolute motion? 9. What is called velocity?

### **Analytical (Mark-2):**

1. Although the speed of the earth around the sun is a periodic motion but not rotational motion. Explain.
2. Acceleration due to gravity is a derived quantity. Explain.
3. The position of an object with respect of a point can be changed without changing its distance. Explain.
4. Explain why the weight of a body varies at different places of the earth.
5. Why is the acceleration of an object moving uniformly zero?
6. Explain why trees from outside of a moving bus seem moving.
7. What do you mean by instantaneous speed? Explain.
8. Why is the motion of simple pendulum oscillatory?
9. Write down two differences between velocity and speed.
10. Write down the laws of falling bodies.
11. The acceleration of falling body is uniform. Explain.
12. There is no acceleration if the velocity does not change. Explain it.
13. Gravitational acceleration is a derived quantity. Explain it.
14. Write down two differences between scalar and vector quantity .
15. Why weight and mass are not the same type of quantity?
16. Write down two differences between linear and rotational motion.
17. The rotation of the earth around the sun is which type of motion? Explain.
18. The velocity of a body moving with uniform speed may not be uniform- explain.

[N. B:—All Board CQ of given chapters will have to be completed.]