ISC Class 11 Physics Important Questions

1. Give the dimensions of Boltz Mann's constant.

2. A bullet fired vertically upward falls at the same place after some time. What is the displacement of the bullet?

3. A constant retarding force of 100N is applied to a body of mass 10kg moving initially with a speed of 30ms-1. What is the retardation of the body?

4. State the Principle of Continuity of fluids.

5. What is the relation between the pressure and the kinetic energy per unit volume of a gas?

6. Give any one essential feature of Carnot's ideal heat engine.

7. Which physical quantity remains conserved in Simple Harmonic Motion?

8. Round off 3.7846 up to 3 significant figures.

9. What is meant by absolute error?

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12. A box of 50kg is lifted by a man of mass 60kg to a height of 50m. Calculate   the work done by the man.

13. How much mass of water can be lifted by a pump motor of 9.8KW in one minute to a height of 5m?

14. A shot fired from cannon explodes in air. What will be the changes in the momentum and the kinetic energy?

15. Two bodies of masses 0.5kg and 1kg are lying in the X-Y plane at points (-1, 2) and (3, 4) respectively. Locate the center of mass of the system.

16. Define Orbital Velocity. Obtain the relation between orbital velocity and acceleration due to gravity g, for a satellite orbiting very close to the surface of the earth.

17. Define Bulk modulus of elasticity and write an expression in terms of pressure 'P', volume 'V' and change in volume 'ΔV'.

18. With reference to Elasticity, define the following terms:

    a. Stress

    b. Strain

19. What is Magnus effect? Write any one application of this effect.

20. State the First Law of thermodynamics. Name the physical quantity that remains conserved in this law?