SREE CHAITANYA MAHAVIDYALAYA

B.Sc (General) INTERNAL EXAMINATION-2022

SEMESTER-I

Subject: Physics Full marks-8

Answer any four questions from the following:

4×2=8

- 1. State Kepler's laws.
- 2. Describe the variation in the value of g when an object of mass m is situated at a depth h below the earth's surface.
- 3. What is Escape velocity?
- 4. Show that the total energy is constant for a particle in simple harmonic motion.

5. Solve:
$$\frac{d^2y}{dx^2} - 5\frac{dy}{dx} + 6y = 0$$

6. Define the term "Angular momentum". Is it a vector or scalar quantity?