Jashore University of Science and Technology
Bachelor of Science in Textile Engineering
1st semester of 1st year, 2025

Course no.: 053322 PHY 1125   Course title: Physics – I

Class test no.: 02   Date: 10 November 2025

Roll:

1. Define surface tension and give its SI unit. [2]

2. Explain why small drops of water are spherical in shape. [2]

3. The radius of a water drop is 0.001 m. Find the excess pressure inside the drop ($T = 0.075$ N/m). [2]

4. What is interference of light? State the conditions for sustained interference. [2]

5. The distance between the central bright fringe and the 5th bright fringe in a Young's double slit experiment setup is 5 mm. If D = 1.5 m and d = 0.5 mm, find the wavelength of light used. [2]