

Jashore University of Science and Technology

Department of Physics

Bachelor of Science with Honours in Physics

1st semester of 3rd year, Academic session: 2022–2023

Course no.: PHY 3103

Course title: Quantum Mechanics I

Class test no.: 02

Date: February 18, 2024

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1. What is meant by Hermitian operator? Write down the properties of a Hermitian operator. [6]
2. Prove that the product of two Hermitian operator is a Hermitian operator if they commute. [4]
3. Write down the properties of commutator. Show that $[\hat{x}, \hat{p}_x] = i\hbar$. [10]