

**Lamrin Tech Skills University Punjab**  
University School of Engineering and Technology

Program: BTECH CSE(IBM)

MST-II Nov. 2024

Semester: 3

Time: 1.5 hrs.

Max. Marks: 25

Roll No: \_\_\_\_\_

**Subject: Open Source software & Open standards (UGCS-106)**

**INSTRUCTIONS TO CANDIDATES**

1. SECTION-A is Compulsory carrying one marks each.
2. SECTION-B you have to attempt 3 questions carrying 5 marks each.
3. SECTION-C you have to attempt 1 question carrying 8 marks each.

**Section-A (5x1=5)**

- a. Define open standards in the context of technology.
- b. What is the purpose of de jure standard-setting organizations?
- c. List two examples of closed standards.
- d. What is meant by the adoption process of a standard?
- e. Name two drivers for the adoption of standards in the industry.

**Section-B (3x4=12)**

- a. Explain the importance of standards in enhancing interoperability across industries.
- b. Compare closed standards and open standards with relevant examples.
- c. Discuss the history of the adoption of standards and the factors that have driven this evolution.
- d. Illustrate the hierarchy of standards development with an example.
- e. Analyze the differences between testing, certification, and review phases in the standards lifecycle.

**Section-C (1x8=8)**

- a. Describe the lifecycle of standards in detail, highlighting the development and review phases. Provide a real-world example.
- b. Evaluate the role of IBM in promoting open standards for cloud computing and its contributions to standardization in other areas.