UNITED INTERNATIONAL UNIVERSITY
Department of Computer Science and Engineering (CSE)

Course Title: Theory of Computation	**Course Code: CSE 2233**	**Credit Hours: 3.0**
Trimester & Year: Fall 2023	**Section: F,G (A)**	**MdMH**

CT-02

Total Marks: **10** Time: **25** min

1. Convert the following **ε-NFA** to an equivalent **DFA**. (Remember to draw the state diagram of the DFA) **6**

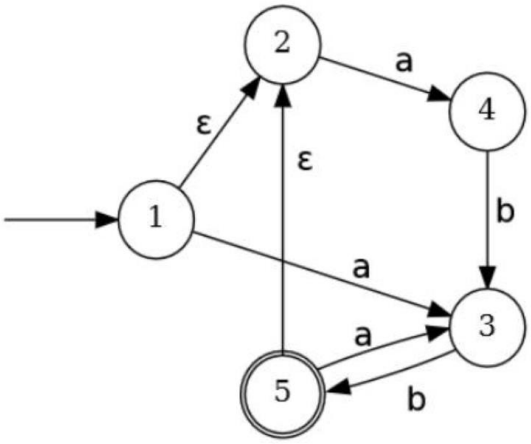

Figure 01: State Diagram of ε-NFA

2. Construct an **NFA** defined over alphabet $\sum = \{x, y, z\}$ that accepts all the strings of the following Language, L where, **4**

L = {w | w does not start with **'y'**, contains **'xyz'** or **'yzx'** and ends with **'yx'** or **'yz'**}.