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: Summer 2024	**Section: C, I (2)**	**MdMH**

CT-02

Total Marks: **10** Time: **30** min

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

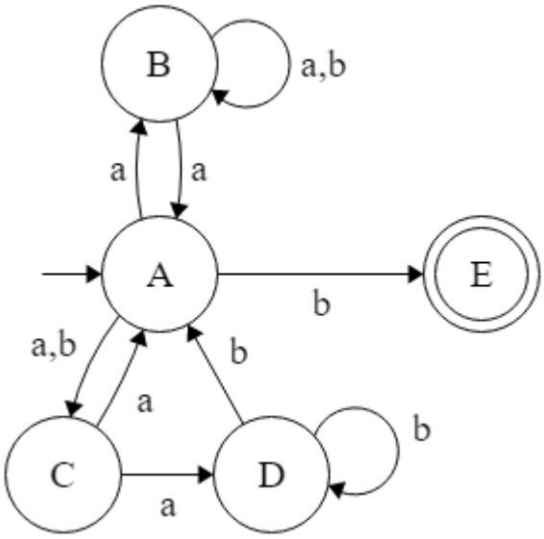

Figure 01: State Diagram of NFA

2. Construct an **NFA** defined over alphabet $\sum = \{0, a, b\}$ that accepts all the strings of the following Language, L where, **4**

L = {w | w starts with **'0ab0' or 'b00a'**, contains **'b0a'** or **'b00'** and ends with **'b'**}.