## WILL STREET, S

## 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

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

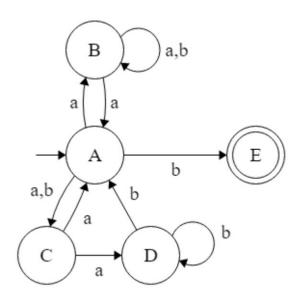


Figure 01: State Diagram of NFA

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

 $L = \{w \mid w \text{ starts with '0ab0' or 'b00a', contains 'b0a' or 'b00' and ends with 'b'}\}.$