**UNITED INTERNATIONAL UNIVERSITY**

Department of Computer Science and Engineering (CSE)

**Course Title: Theory of Computation Trimester & Year: Summer 2024**

**Course Code: CSE 2233 Section: C, I (1)**

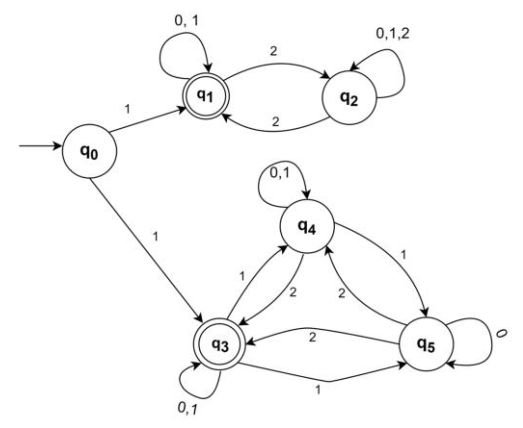
CT-02

**Credit Hours: 3.0**

**MdMH**

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**

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**Figure 01: State Diagram of NFA**

1. Construct an **NFA** defined over alphabet **∑ = {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’**}.