| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| --- | --- | --- | --- | --- |
| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **Course Name:** | **Digital Logic Design** | **Course Code:** | **EE227** |
| **Degree Program:** | **BS-CS** | **Semester:** | **Spring 2022** |
| **Due Date:** | **25th April, 2022** | **Weight** |  |
| **Section:** | **A,B & N** | **Page(s):** |  |
| **Exam Type:** | **Assignment # 4** | **Total Marks:** |  |
| **Student : Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Roll No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Section:\_\_\_\_\_\_\_** | | | | |
| **Instruction/Notes:** | Attempt all questions. Programmable calculators are not allowed. | | | |

**Due Date 25th April 2022**

Book: 5th Ed Logic n Computer Design Fundamentals by Morris Mano

**No late submissions are allowed.**

**Q1.**

4-2.

4-3.

4-4.

**Q2**. A sequential circuit with two D flip-flops A and B, one input Y, and one output Z is specified by the following input equations: DA = BY + AY, DB = Y, Z = A B (a) Draw the logic diagram of the circuit.

**Q3.** Construct a JK flip-flop using a D Flip-flop, a 2-to-1 line multiplexer and an inverter.