

Department of Electrical and Electronics Engineering
Kathmandu University
Second internal Examination

Course: EEG202

Time: 50 mins.

F.M.: 15

Symbols have their usual meaning. Students are required to write answer in their own words as far as practicable.

1. Write the characteristic equation of SR flip-flop and convert the SR flip-flop to the D flip-flop with the help of conversion table. [5]
2. Design a combinational logic circuit using a ROM. The circuit accepts a three-bit number and outputs a binary number equal to the square of the input number. [5]
3. Design a sequential logic circuit for Mod-12 **asynchronous** up counter and explain the working mechanism with the help of timing diagram. [5]