

Roll No \_\_\_\_\_

MAY 2014  
**BCA(Sem-2nd )**  
**Digital Circuits and Logic Design**  
**Subject: BC-205(N-2)**

Total no of page-1

TIME: 03 Hours

Maximum

Marks :60

Instructions to candidates

- 1) Section – A is Compulsory.
- 2) Attempt any Four Questions from Section-B

Section-A

(10x2=20)

Q1)

- a) Define BCD codes?
- b) What is Flip Flops?
- c)  $(101.0101)_2 = ( )_{10}$
- d) What are Binary Counters?
- e) Define Error?
- f) What is SISO?
- g) Define Flip Flop?
- h) Give the Cummutative Law?
- i) Define MUX?
- j) Give Example of SOP and POS form?

Section-B

(4X10=40)

- Q2) Discuss various types of Logic Gates?
- Q3) Explain the working of 3:8 line decoder ?
- Q4) Minimize the following expression in sum of product form  
$$X = A'B'C'D' + A'B'CD' + AB'C'D' + A'CD + AB'CD'$$

Also Draw the logic circuit.
- Q5) Explain 3 bit UpDown Asynchronous Counter?
- Q6) Explain various Error Detecting and Correcting codes?
- Q7) Discuss the working of JK Flip Flop?

————— End —————