DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, MAY 2011.

ELECTRONIC DEVICES AND DIGITAL CIRCUITS

(2003 onwards)

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

$(5 \times 20 = 100)$

1. (a) What is Gray code? Write its importance. Give examples. (7)

    (b) What is Excess 3 code? Give example. (7)

    (c) Explain about binary code. (6)

2. Explain about the following gates

    (a) NOT (5)

    (b) OR (5)

    (c) AND (5)

    (d) NOR (5)

3. Write briefly about

    (a) Half Adder (10)

    (b) Half Subtractor. (10)

4. (a) What is flip flop? With neat sketch and truth table explain the J-K flip flop. (10)

    (b) Write short notes on shift register. (10)

5. Write briefly about the working principle of P-N Diode and its characteristics. (20)

6. Discuss briefly about

    (a) Operation of N-channel JFET.   (10)

    (b) FTT.   (10)

7. Describe about

    (a) Arithmetic circuits   (10)

    (b) Signed binary numbers.   (10)

8. Explain about digital circuit and combinatorial circuits.

                                            (20)