DISTANCE EDUCATION

B.C.A. DEGREE EXAMINATION, MAY 2008.

ELECTRONIC DEVICES AND DIGITAL CIRCUITS

(2003 onwards)

Time : Three hours   Maximum : 100 marks

Answer for any FIVE questions.

All questions carry equal marks.

1.   (a)   Briefly explain number system.

      (b)   Explain with suitable for Binary addition, Subtraction.

2.   (a)   Explain details about Logic gates.

      (b)   Prepare the following binary number system:

            (i) $011\,011 \times 1100$

            (ii)   75.85 * 23.5.

3.   (a)   State and prove De Morgan's three theorems.

      (b)   Explain details about full adder and full subtractor.

4.   (a)   Discuss about the K.map with suitable example.

      (b)   Explain in details about shift register. Right and left.

5.   (a)   Write a summary about asynchronous counter and synchronous counter.

      (b)   Explain details about pn diode and characteristics.

6. (a) Briefly explain about FET, JFET and MOSFET.

   (b) Explain details about op-amp characteristics.

7. (a) Distinguish between UJI and SCR.

   (b) Explain about application of Op-Amp.

8. (a) Explain details about review of amplifier and oscillator.

   (b) Discuss about gray code and ASCII code.

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