INTERNAL ASSESMENT EXAM

SUB-DIGITAL ELECTRONICS AND MICROPROCESSOR

BRANCH-ELECTRICAL (SEM-5TH)

TIME-1HR F.M-20

1(A) Convert Binary no 1000 to Gray code No.How many Ex-or gate is required to convert MSB of Binary no to MSB of Gray code?(2 marks)

(B)Which gate is called Stair case logic gate? Write the truth table and logic symbol of EX-NOR GATE? (2 marks)

(C) What is UNIVERSAL Gate? Write truth table of EX-OR GATE? (2 marks)

(D)Convert Binary No 1101001 to Decimal No, Octal no, Hexadecimal no. (2 marks)

(E) Draw the circuit symbol of Half adder Circuit. Write the truth table of Half Adder circuit. (2 marks)

Answer any Two

2-Draw the circuit symbol of Full adder circuit. Design the Full adder circuit using two Half adder circuit. Write the truth table of Full adder circuit. (5marks)

3-What is Combinational circuit? Write truth table and draw the circuit symbol of Full subtractor. Write the equation of full Subtractor. (5marks)

4- Draw the EX-OR gate using Nand gates only. Write De-Morgan's Law.

What is K-MAP? Draw the four Variable K-MAP. Why it is used? (5marks)