

B.Sc (Information Technology) - 2nd Semester (old sylb 2017-18)

(2721)

Paper-III: Principles of Digital Electronics

Time Allowed: 2 hrs.

Max. Marks: 75

Note: There are EIGHT questions of equal marks. Candidates are required to attempt any FOUR questions.

Q1	What is the role of Number System? Discuss the procedure for conversion from Decimal to Binary and vice versa.	
Q2.	Discuss the following Logic Gates with their Truth tables: (a) NAND (b) NOR (c) AND	
Q3.	Explain the working of following Combinational circuits: (a) ADDER (b) DECODER	
Q4.	Discuss the use of RS Flip flop and JK Flip flop with the help of circuit diagram.	
Q5.	What are the different forms of Boolean Expressions? How K maps are used for minimisation of the circuits?	
Q6.	Differentiate the following: (a) ROM and RAM memory chips (b) Static and dynamic devices	
Q7.	Write notes on the following: (a) BCD code (b) ASCII code	
Q8.	Describe the laws of Boolean algebra and illustrate the use of associative laws.	