Code: 2736　　　　　　　　**M.Sc. IT Semester -I**

Time: 2½ hrs　　**Paper No. 1: Computer System Organization**　　**Total Marks 70**

Q-1(A)	What is character code? Explain EBCDIC in detail.	7
Q-1(B)	Explain floating point representation in detail.	7
	OR	
Q-1(A)	Write a note on ASCII character code.	7
Q-1(B)	Explain different functional units of computer system.	7
Q-2(A)	Write a note on parallel instruction execution.	7
Q-2(B)	Explain types of bus with its diagram.	7
	OR	
Q-2(A)	What is Microprocessor? Draw a pin diagram of 8086 microprocessor.	7
Q-2(B)	Write a detail note on Primary and Secondary memory.	7
Q-3(A)	Draw the circuit for (A.B'.C) + (A'.B.C').(A+B.C)' using only NAND gate.	7
Q-3(B)	Explain POS and SOP with example	7
	OR	
Q-3(B)	Draw the circuit for (A'+B+C') . (A.B'+C) +(A.B.C)' using only NOR gate.	7
Q-3(A)	Explain and prove associative and distributive law by truth table	7
Q-4(B)	What is encoder? Explain 4 to 2 encoder with example.	7
Q-4(A)	Write a note on multiplexer.	7
	OR	
Q-4(A)	What is decoder? Explain 3 to 8 decoder with example.	7
Q-4(B)	Explain arithmetic circuit with example.	7
Q-5(A)	What is Flip-Flop? Explain JK flip flop with example.	7
Q-5(B)	What is latch? Explain RS latch	7
	OR	
Q-5(A)	What is counter? Explain ripple counter with example.	7
Q-5(B)	Write a note on registers.	7