BE Semester- <u>5</u> (Electrical Engineering) Question Bank Basic Microprocessors

All questions carry equal marks (10 marks)

Q.1	Draw the block diagram of microprocessor 8085. Discuss multiplexing of lower
	order data bus.
Q.2	Discuss various interrupts available in microprocessor 8085.
Q.3	Draw pin diagram of microprocessor 8085. Discuss various pins related with
	control unit and their functions.
Q.4	How the bit length of any microprocessor can be defined? Explain difference
	between 8 bits and 16 bits microprocessors.
Q.5	Classify various instructions as per their functionality in the microprocessor 8085.
	Explain arithmetic instructions with suitable example.
Q.6	It is required to interface 2 K byte of memory with microprocessor 8085. Draw
	interfacing circuit and find its memory address range.
Q.7	Explain timing and control diagram when the instruction IN 01H is executed.
Q.8	Write a program to find the smallest number among three numbers stored from
	memory locations 2060 H onwards. Store the result in memory location 2063 H.
Q.9	Discuss the byte length of 8085 instructions.
Q.10	Discuss the significance of ALU signal. What is the need of de-multiplex the bus
	AD_7-AD_0 .
Q.11	Write a program to generate a time delay using a register pair.
Q.12	Explain algorithm and write program to convert given binary number in to BCD
	number.
Q.13	Explain memory mapping of microprocessor 8086. Discuss base address, offset and
	physical address.
Q.14	Discuss pin diagram of microprocessor 8086 in MIN mode.
Q.15	Discuss various addressing modes of microprocessor 8086.
Q.16	Discuss various arithmetic instructions with appropriate example.
Q.17	Discuss MAX mode of 8086.
Q.18	Discuss IRET instruction with reference to 8086 microprocessors.
Q.19	Discuss hardware and software development tools used for 8086.
Q.20	Write short note on 8086 assembler programs.
Q.21	Compare 8085, 8086 and 80286 microprocessor.
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Q.22	Discuss instruction byte length of microprocessor 8086.
Q.23	Discuss MIN mode of 8086.
Q.24	Explain bus interface unit and execution unit of microprocessor 8086.
Q.25	Discuss microprocessor 80286.
Q.26	Discuss microprocessor 80386.
Q.27	Discuss microprocessor 80486.
Q.28	Discuss Pentium microprocessor.
Q.29	Discuss hand assembling. Compare it with machine assembling.
Q.30	Explain algorithm and write program to convert given decimal number in to BCD
	number.
Q.31	Discuss string instructions of microprocessor 8086.
Q.32	Discuss stack related instructions of microprocessor 8086.
Q.33	Discuss arithmetic instructions of microprocessor 8086.
Q.34	Discuss logical instructions of microprocessor 8086.
Q.35	Write a program to sort a string in alphabetical order from A to Z.
Q.36	Write a program using 8085 assembly language to multiply two eight bits number.
Q.37	Write a program using 8085 assembly language to divide 16 bits number by eight
	bits number.
Q.38	Write a program using 8085 assembly language to perform subtraction of 16 bits
	number.
Q.39	Write a program using 8085 assembly language to perform subtraction of 8 bits
	number without using SUB instruction.
Q.40	Write a program using 8085 assembly language to perform exclusive OR operation
	without using XOR instruction.