



B.Tech - Even Sem : Semester in Exam-I

Academic Year:2021-2022

**21EC1202 - Computer Organization & Architecture**

Set No: 2

Time:		Max.Marks: 50					
S.NO	Answer All Questions	Choice	Options	Marks	CO	CO BTL	COI CTL
1.	Define Bus and Explain different types of Buses.	choice Q-2		4.5Marks	CO1	2	1
2.	Provide the assembly language zero-address instructions for the give expression: $(A+B+C+D) / 4$ .			4.5Marks	CO1	2	2
3.	Emphasize the significance of Program Counter in Subroutine and demonstrate the Subroutine process with an example.	choice Q-4		8Marks	CO1	2	1
4.	Design an ALU (with any 4 operations) using the suitable combinational logic circuit/s.			8Marks	CO1	2	2
5.	List out different addressing modes and explain at least two of them in detail. List out the different instruction set of a processor.	choice Q-6		12.5Marks	CO1	2	1
6.	Illustrate different types of operations in instruction set.			12.5Marks	CO1	2	2
7.	List out the common Micro-operations with one example each.	choice Q-8		4.5Marks	CO2	2	1
8.	Explain the four essential registers required for instruction execution.			4.5Marks	CO2	2	2
9.	Illustrate in detail about Microprogrammed control unit	choice Q-10		8Marks	CO2	2	1
10.	Interpret the significance of CPU Registers in Program Execution.			8Marks	CO2	2	2
11.	Illustrate Instruction Cycle with neat sketch. Briefly report the significance of the internal structure of CPU with the suitable block diagram.	choice Q-12		12.5Marks	CO2	2	1
12.	Explain the each function of Hardwired control unit with neat block diagram			12.5Marks	CO2	2	2

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