DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Winter Examination – 2022

Course: B. Tech.   Branch :Computer Science & Engineering   Semester :III

Subject Code & Name: (BTCOC304)Computer Architecture & Organization

Max Marks: 60   Date: Duration: 3 Hr.

Instructions to the Students:
1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

		(Level/CO)	Marks
Q. 1	**Solve Any Two of the following.**		12
A)	Explain the different components of Central Processing Unit?	Understand	6
B)	Explain different types of memories with examples?	Remember	6
C)	Explain with neat diagram computer components top- level view?	Analysis	6
Q.2	**Solve Any Two of the following.**		12
A)	Explain different types of instructions sets.	Remember	6
B)	Explain different addressing modes.	Analysis	6
C)	Explain the architecture of RISC and CISC processor.	Understand	6
Q. 3	**Solve Any One of the following.**		12
A)	Explain the function of ALU.	Understand	6
B)	Briefly explain the following representations: sign magnitude, twos complement.	Synthesis	6
C)	What are the four essential elements of a number in floating-point notation?	Analysis	6
Q.4	**Solve Any Two of the following.**		12
A)	Explain types of semiconductor memories technologies.	Understand	6
B)	Explain memory hierarchy in computer system.	Remember	6
C)	Explain the working of optical memory.	Understand	6
Q. 5	**Solve Any One of the following.**		12
A)	Explain Programmed I/O module and Interrupt driven I/O.	Understand	6
B)	Explain Input/output organization of computer system.	Remember	6
C)	Explain the Flynn's classification.	Analysis	6