Code No: R1921056 **R19** SET - 1

II B. Tech I Semester Supplementary Examinations, September - 2021
COMPUTER ORGANIZATION
(Com to CSE, IT)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions each Question from each unit
All Questions carry **Equal** Marks
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1	a)	Explain how a binary number can be converted to an octal and a hexadecimal number.	[8M]
	b)	Explain in detail about fixed-point representation.	[7M]

Or

2	a)	Design a 4-bit odd parity generator and checker and explain it.	[8M]
	b)	Draw a flowchart which explains multiplication of two signed magnitude fixed point number.	[7M]
3	a)	With the help of block diagram, explain the 4-bit binary subtractor.	[8M]
	b)	With the help of a diagram explain one stage of arithmetic logic shift unit.	[7M]

Or

4	a)	Discuss in brief about the flowchart for basic computer operations.	[8M]
	b)	What is interrupt? Explain different types of interrupt.	[7M]
5	a)	Illustrate the use of various addressing mode with examples.	[8M]
	b)	List and explain the functions of control unit.	[7M]

Or

6	a)	Writ about symbolic micro program and binary micro program.	[8M]
	b)	Discuss the two techniques to design the control unit.	[7M]
7	a)	Explain the various available formats and storage capability of DVD.	[8M]
	b)	What do you mean by the associative memory? Give the Hardware organization of associative memory.	[7M]

Or

8	a)	Discuss the various cache block replacement algorithms.	[8M]
	b)	What are the different kinds of DMA? Explain.	[7M]
9	a)	Explain multiprocessor system and its characteristics.	[8M]
	b)	Discuss the functioning of crossbar switching network.	[7M]

Or

10	a)	Explain the concept of speedup ratio with an example.	[8M]
	b)	Mention the pipeline conflicts that cause the instruction pipeline to deviate from its normal operation.	[7M]

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