

Code No: 7D408

Date: 25-Aug-2021 (Fri)

**B.Tech II-Year II- Semester External Examination, Aug/Sept-2021 (Regular)**

**COMPUTER ORGANIZATION (CSE and IT)**

Time: 3 Hours

Max.Marks:70

**Note:** a) No additional answer sheets will be provided.  
b) All sub-parts of a question must be answered at one place only, otherwise it will not be valued.  
c) Missing data can be assumed suitably.

**ANSWER ANY 5 OUT OF 8 QUESTIONS. EACH QUESTION CARRIES 14 MARKS.**

**Bloom's Cognitive Levels of Learning (BCLL)**

Remember	L1	Apply	L3	Evaluate	L5
Understand	L2	Analyze	L4	Create	L6

	BC	CO(s)	Marks
	LL		
1. a) Describe Fixed point number representation.	L1	CO1	[7M]
b) Write a short on System software.	L1	CO1	[7M]
2. a) Explain the Arithmetic micro operations with suitable examples.	L3	CO2	[7M]
b) Write a short notes on shift micro operations.	L2	CO2	[7M]
3. a) Explain the flow chart of Booth's algorithm with neat a sketch.	L2	CO3	[7M]
b) Multiply 100111 with 11011 using Booth's algorithm.	L3	CO3	[7M]
4. a) Explain the architecture of 8086 micro processor with a neat diagram.	L2	CO4	[7M]
b) Discuss the addressing modes of 8086.	L3	CO4	[7M]
5. a) Describe the following assembler directives of 8086 micro processor. i) ASSUME ii) EQA iii) OFFSET	L1	CO5	[7M]
b) Prepare an 8086 assembly language program to convert binary number to BCD number.	L6	CO5	[7M]
6. a) Draw and explain read/write cycle timing diagram of 8086 in minimum mode.	L4	CO6	[7M]
b) Explain the modes of operations of 8255 PPI.	L3	CO6	[7M]
7. a) Draw the connections between processor and memory.	L1	CO1	[4M]
b) Write in brief about stack organization.	L2	CO2	[5M]
c) Explain about micro-programmed control.	L2	CO3	[5M]
8. a) Write the structure of 8086 flag register and explain.	L3	CO4	[5M]
b) Differentiate between branch and call instructions.	L4	CO5	[5M]
c) Write short notes on vector interrupt table.	L2	CO6	[4M]

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