

Code No:9CC54

Date: 20-August-2024 (T.N)

**B.Tech II-Year II- Semester External Examination, August-2024 (Regular)**  
**COMPUTER ORGANIZATION (CSE and IT)**

Time: 3 Hours

Max.Marks:60

**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.

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

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

**Part - A**

Max.Marks: 6x2=12

**ANSWER ALL QUESTIONS, EACH QUESTION CARRIES 2 MARKS.**

	BCLL	CO(s)	Marks
1 Explain about the Bus structure.	L6	CO1	[2M]
2 Define register transfer language.	L1	CO2	[2M]
3 Discuss about control memory.	L2	CO3	[2M]
4 Define microprocessor.	L1	CO4	[2M]
5 Define Macro.	L1	CO5	[2M]
6 Define interrupt service routine.	L1	CO6	[2M]

**Part – B**

Max.Marks: 6x8=48

**ANSWER ALL QUESTIONS. EACH QUESTION CARRIES 8 MARKS.**

	BCLL	CO(s)	Marks
7. Discuss the functional units of a digital computer and show their interconnections.	L2	CO1	[8M]
OR			
8 State the floating point representation. Explain the IEEE standards for floating point representation with example.	L1	CO1	[8M]
9. Explain various shift micro operations.	L6	CO2	[8M]
OR			
10 Draw and explain the flow chart for memory reference instructions.	L1	CO2	[8M]
11 Explain how the address sequencing in micro programmed control unit.	L1	CO3	[8M]
OR			
12 Explain the flow chart for addition operation with sign-magnitude data.	L6	CO3	[8M]
13 Define Flag. Explain the different Flags present in 8086 processor along with Flag register.	L1	CO4	[8M]
OR			
14 Define addressing mode and explain the different addressing modes presented in 8086 Microprocessor with examples.	L1	CO4	[8M]
15 Discuss various Assembler directives available in 8086 programming.	L2	CO5	[8M]
OR			
16 Write an 8086 program to add two 16 bit numbers in CX and DX and store the result in location 0500H addressed by DL.	L1	CO5	[8M]
17 Draw and explain each signal function of 8086.	L1	CO6	[8M]
OR			
18 Explain the architecture of 8255 PPI.	L6	CO6	[8M]