

Reg. No: 

--	--	--	--	--	--	--	--	--	--

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**  
**(AUTONOMOUS)**  
**MCA I Year I Semester Regular & Supplementary Examinations May-2022**  
**COMPUTER ORGANIZATION**

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

**UNIT-I**

- 1 a Build the Flow chart for Division with suitable example. L3 6M  
 b Examine signed and unsigned numbers for positive numbers with a suitable example. L4 6M

OR

- 2 Using K- map simplify the Boolean function L4 12M  
 $F(w, x, y, z) = \sum(0, 1, 2, 4, 6, 8, 9, 12, 13, 14)$ .

**UNIT-II**

- 3 a What is memory hierarchy? L1 6M  
 b Write short note on Main memory. L1 6M

OR

- 4 Discuss in detail about design of control unit. L2 12M

**UNIT-III**

- 5 Discuss about Arithmetic instructions in detail with neat diagram. L6 12M

OR

- 6 a What is interrupt? Explain about simultaneous request handling by the processor. L1 6M  
 b Explain process control instructions in detail. L2 6M

**UNIT-IV**

- 7 a Explain about Peripheral devices. L2 6M  
 b Discuss about Input-output interface. L6 6M

OR

- 8 a Explain Daisy chaining in detail. L5 6M  
 b Explain Parallel priority in detail. L5 6M

**UNIT-V**

- 9 a Explain about Parallel Processing and its Types. L2 6M  
 b Design Pipelining with example. L3 6M

OR

- 10 Build the Multiprocessor and its classification in detail. L3 12M

\*\*\* END \*\*\*