

Roll No. ....

Printed Pages : 2

**8401**

**BT-4 / M-15**

**COMPUTER ARCHITECTURE AND ORGANIZATION**

**Paper-CSE-202 E**

*Time allowed : 3 hours*

*[Maximum marks : 100]*

*Note : Attempt only five questions. All questions carry equal marks.*

1. (a) Explain Flynn's classifications of computers in detail. 10  
(b) Explain why operating system is essential for computers ? 10
2. (a) Differentiate RISC and CISC classification. 10  
(b) Define addressing mode. Define types of addressing modes with suitable examples. 10
3. Explain microinstruction format. Also explain how the field of micro operation is decoded ? 20
4. Explain CPU architecture types with examples. 20
5. A computer uses RAM chips of  $1024 \times 1$  capacities. Answer the following  
(a) How many chips are needed ? And how should their address lines be connected to provide a memory capacity of 1024 bytes ? 10  
(b) How many chips are needed to provide a memory of 16 K bytes ? 10

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6. (a) Explain Amdah's law in detail. 10  
(b) Explain micro-processor level of parallelism. 10
7. (a) Explain types of instruction in 8086 in detail. 10  
(b) Design Binary to Octal decoder. 10
8. Write short notes on :  
(a) Store Program Control Concept 7  
(b) Types of Interrupts 7  
(c) Static and Dynamic Memory Types 6

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