

24165

B. Tech. 4th Semester (CSE) F. Scheme  
Examination, May-2014

COMPUTER ARCHITECTURE AND ORGANISATION

Paper-CSE-210-F

*Time allowed : 3 hours ]*

*[Maximum marks : 100*

*Note : (i) Q. No. 1 is compulsory.*

*(ii) Attempt four questions from remaining four parts selecting one question from each part.*

1. Write note on the following :

- |                  |                        |
|------------------|------------------------|
| (a) Latches      | (b) Registers          |
| (c) Multiplexers | (d) RAM                |
| (e) ROM          | (f) Micro-instructions |
| (g) Main memory  | (h) Cache memory       |
- 20

**Part-A**

2. (a) Describe different type of flip-flop with suitable examples. 10
- (b) Define the performance metrics.
- (i) MIPS (ii) MFLOPS 10
3. Describe Flynn's classification of computers in detail with appropriate example. 20

**Part-B**

4. (a) Difference between RISC and CISC. 10  
(b) Define the operations in the instruction set ? 10
5. Define addressing modes. Explain different types of it with example. 20

**Part-C**

6. (a) Explain associative and direct mapped cache organization. 10  
(b) Explain Micro instruction sequence counter. 10
7. What are the basic non-pipelined CPU architecture types ? Explain register and stack based architecture type. 20

**Part-D**

8. (a) What is parallelism ? Explain type it. 10  
(b) What do you know Amdhali Law ? Explain with diagram. 10
9. (a) Explain three types of instructions in 8086 in detail. 10  
(b) Explain the types of the interrupts in 8086 in detail. 10