

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 :

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|------------------|------------------------|
| (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.

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| (i) MIPS | (ii) MFLOPS | 10 |
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3. Describe Flynn's classification of computers in detail

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