

**B.Tech. 5th Semester (Electronics & Communication
Engg.-III) Examination, December-2013**

COMPUTER ARCHITECTURE AND ORGANIZATION

Paper-CSE-210-F

Time allowed : 3 hours] [Maximum marks : 100

*Note : Q. 1 is compulsory. Attempt total five questions
taking one question from each section.*

1. Write short note on : $4 \times 5 = 20$ marks

(a) Micro Program Sequence

(b) SISD

(c) Interrupt

(d) MSAM.

Section-A

**2. What do you mean by a Multiplexer ? Design a 4×1
Multiplexer using AND, OR and NOR gate. 20**

**3. (a) Describe the Flynn's Classification of
Computers. 10**

(b) Discuss the various sequential logic blocks. 10

Section-B

4. Define different Addressing Modes in detail with suitable example. 20
5. What are the characteristics of RISC and CISC processors ? 20

Section-C

6. Draw and explain the detailed path for a Register Based CPU. 20
7. What is the Design Principle for the Cache Memory ? 20

Section-D

8. (a) Describe the Amdahl's Law in detail. 10
- (b) Discuss various address sequencing schemes. 10
9. Explain Instruction Level Parallelism and Processor Level Parallelism in detail. 20