Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

MCA (2015 Batch) (Sem.–1)

COMPUTER ORGANIZATION & ASSEMBLY LANGUAGE

Subject Code : MCA-103

Paper ID : [72709]

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**
3. Use of non-programmable **scientific calculator** is allowed.

SECTION-A

1 Discuss the various Addressing Modes using suitable example.

2 What are RISC & CISC Architectures? Differentiate them.

SECTION-B

3 What is Vector Processing? Explain its operations.

4 Explain the importance of Priority Interrupt controller.

SECTION-C

5 Discuss address mapping using pages.

6 What do you mean by page replacement? How it is helpful in memory organization?

SECTION-D

7 Explain inter processor communication & synchronization.

8 Describe the assembly language use for sorting of a list.

SECTION-E

9 **Write briefly :**

a) Explain Multistage switching network.

b) Write short note on Registers.

c) Name the various Addressing Modes.

d) Discuss the Importance of Virtual memory.

e) Explain Hypercube Interconnections.

f) Write short note on Multiprocessor synchronization.

g) Explain Array Processors.

h) Why the interrupt masks provided in any processor?

i) Discuss segmented page mapping.

j) Explain DMA Transfer.