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

Total No. of Questions : 18

B.Tech. (CSE) (Sem. 3)

COMPUTER ARCHITECTURE

Subject Code : BTCS-301

M.Code : 56591

Date of Examination : 19-05-2023

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Answer Briefly :

a) Define Accumulator logic.

b) Discuss Register transfer language.

c) Define Control Unit.

d) What are Memory reference instructions?

e) What is meant by Instruction cycle?

f) Write use of interrupts.

g) What are CPU registers?

h) Discuss virtual memory.

i) Briefly explain array processors.

j) List advantages of pipelining.

SECTION-B

2. Explain different arithmetic operations used in computer architecture.

3. What are the advantages and disadvantages of microprogrammed design approaches?

4. What is DMA? Give an example where DMA mode of data transfer is useful.

5. Discuss the role of cache memory in computer architecture.

6. Write a short note on Inter processor communication and synchronization.

SECTION-C

7. Briefly explain the use of RISC and CISC architecture in computer?

8. What is the need of peripheral devices? Explain the modes of data transfer.

9. Discuss the role of Pipelining for data processing in computer organization. How it increases the speed?