

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (AI&ML/AI & Data Science/CE/CSE) (Sem.-4)
COMPUTER ORGANIZATION AND ARCHITECTURE

Subject Code : BTES-401-18

M.Code : 77627

Date of Examination : 05-12-2023

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. Write briefly :

- a) What is I/O subsystem?
- b) Discuss ripple carry adder.
- c) What is hardwired design?
- d) Write functioning of SCII.
- e) What is meant by non restoration?
- f) Write use of DMA.
- g) What are privileged instructions?
- h) Discuss mapping function.
- i) Briefly explain block size.
- j) What are pipeline hazards?

SECTION-B

2. Briefly explain computer instructions formats and sets.
3. What do you understand by interrupt? Explain the steps through which the processor handles the interrupts.
4. What are the benefits of hardwired and microprogrammed design approaches?
5. Discuss the use of cache coherency in parallel processors.
6. How floating point representation and character representation is done in computer organization?

SECTION-C

7. Briefly explain the block diagram and instruction set of 8085 processor? How 8085 is different from 8086?
8. What is the concept of hierarchical memory organization? Discuss its benefits in computer organization.
9. Discuss the basic concept of Pipelining in data processing. How it is used in speedup?

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.