

Roll No.

Total No. of Pages : 02

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B.Tech. (Electronics & Computer Engg.) (2011 Onwards) (Sem.-5)

**COMPUTER ARCHITECTURE**

Subject Code : BTCS-301

M.Code : 70572

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) List various logic microoperations.
- b) Define the term instruction code.
- c) Draw the block diagram of the control unit of Basic Computer.
- d) Define the term microinstruction.
- e) List various data transfer instructions.
- f) What is the purpose of I/O interface?
- g) Explain in brief about serial communication.
- h) Explain in brief about cache memory.
- i) Define the term pipeline.
- j) Explain in brief about vector processors.

**SECTION-B**

- Q2 Write a detailed note on shift microoperations.
- Q3 Write a detailed note on control memory.
- Q4 Explain in brief about asynchronous data transfer.
- Q5 Write a detailed note about array processors.
- Q6 Explain in detail about auxiliary memory.

**SECTION-C**

- Q7 Write a detailed note on Computer Registers.
- Q8 Write a detailed note on RISC and CISC architecture.
- Q9 Explain the following in detail :
  - a) Arithmetic Pipeline with an example.
  - b) Virtual memory.

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