

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 18**

**B.Tech.(CSE)/(IT) (2012 to 2017) (Sem.-3)**

# COMPUTER ARCHITECTURE

**Subject Code : BTCS-301**

**M.Code : 56591**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTION 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

**Write briefly :**

- 1) What is the difference between machine and instruction cycles?
- 2) What are the memory reference instructions? Give examples.
- 3) What is hardwired control? What are its advantages?
- 4) What is control memory?
- 5) Explain the concept of virtual memory.
- 6) What is the role of ROM memory in a computer system?
- 7) What is register transfer language?
- 8) What is an instruction pipeline?
- 9) What are registers? Can they be called memory?
- 10) What is Microprocessor?

## SECTION-B

- 11) What is memory management hardware? Explain.
- 12) Explain the organization of a typical computer system.
- 13) What is pipelined control? Explain.
- 14) What are multilevel memory systems? Explain with the help of a diagram.
- 15) How does a RISC organize CPU works? What are its characteristics and advantages?

## SECTION-C

- 16) What are the ways in which the peripheral devices may be transfer data to a computer system? What are the features of each of these ways? Compare the pros and cons of each type of data transfer.
- 17) Discuss the working of the vector and array processors.
- 18) Explain the design and working of a micro-programmed control unit.

**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.**