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

Total No. of Questions : 07

B.Sc.(IT) (2013 & 2014)   (Sem.–3)
COMPUTER SYSTEM ARCHITECTURE
Subject Code : BS-201
M.Code : 12513

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 SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.**

SECTION-A

1.   **Answer briefly :**

   a. Explain the significance of fourth generation in evolution of computers.

   b. What is program counter?

   c. What is stack pointer?

   d. What is postfix notation?

   e. Differentiate between external and internal interrupts.

   f. Explain pseudo instruction.

   g. What is machine language?

   h. Differentiate between software and hardware interrupt.

   i. What is auxiliary memory?

   j. What is hit ratio?

SECTION-B

2. Explain the evolution of computers.

3. Explain the design of basic computer in detail.

4. a. How to convert infix notation to reverse polish notation? Explain with a suitable example.

    b. Explain the types of interrupts.

5. Differentiate between :

    a. Assembly language and machine language.

    b. Arithmetic shift and logical shift operations.

6. Explain the mapping procedures required for organization of cache memory.

7. a. Explain isolated versus memory mapped I/O.

    b. Explain the modes of data transfer.

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.