K17U 0340

Reg. No. : .....

Name : .....

VI Semester B.Sc. Degree (CBCSS – Regular) Examination, May 2017
(2014 Admn.)
CORE COURSE IN COMPUTER SCIENCE
6B15CSC : Computer Organization

Time : 3 Hours Max. Marks : 40

SECTION – A

1. **One** word answer : **(8×0.5=4)**

   a) The control unit controls other units by generating

   b) _____ is generally used to increase the apparent size of physical memory.

   c) The two phases of executing an instruction are

   d) The interrupt-request line is a part of the

   e) A processor performing fetch or decoding of different instruction during the execution of another instruction is called

   f) The method of accessing the I/O devices by repeatedly checking the status flags is

   g) The location to return to from the subroutine is stored in

   h) To get physical address from logical address generated by CPU we use

SECTION – B

Write short notes on **any seven** of the following questions : **(7×2=14)**

2. What are the different types of computers ?

3. What are the functions of control unit ?

4. Explain interrupts and its uses.

5. What is Instruction Register (IR) and Program Counter (PC) used for ?

P.T.O.

6. Explain about bus.
7. What do you mean by Assembler Directives ?
8. Differentiate between Memory Access Time and Memory Cycle Time.
9. What do you mean by memory mapped I/O ?
10. Explain Register Reference Instructions.
11. State the principle of operation of a carry look-ahead adder.

SECTION – C

Answer **any four** of the following questions : **(4×3=12)**

12. Explain in detail about the basic steps of an Instruction Execution with example.
13. Explain in detail about serial communications.
14. What do you mean by pipelining ? Explain the characteristics of pipeline.
15. Explain in detail about instruction formats and classification of instructions.
16. Explain associative memory.
17. What do you mean by micro operations ? Explain its categories.

SECTION – D

Answer **any two** of the following questions : **(2×5=10)**

18. What is virtual memory ? Why it is necessary to implement virtual memory ? Explain virtual memory address translation.
19. Explain stack organization in detail.
20. Explain in detail about data transfer and manipulation instructions.
21. Explain the general Structure of Central Processing Unit (CPU) with the help of figure.

———————