FIFTH SEMESTER B.C.A. DEGREE EXAMINATION (CCSS) NOVEMBER 2011

BCA – CORE COURSE

CA 5B 08 – MICRO PROCESSOR

Time : Three Hours

Maximum: 30 Weightage

I. Answer all 12 questions. 12x $\frac{1}{4} = 3$ weightage.

1. How many general purpose registers are there in 8086 processor?
2. 8086 is a ........ bit processor.
3. PC stands for ......
4. Reading instruction from memory to processor is referred to as ........
5. .... register is used for the execution of conditional branch instruction.
6. ........ is an example of program control instruction.
7. During a subroutine call, the processor status is stored in ..........
8. .......... is an example of assembler directive.
9. Say true or false: Using MACRO in a program may result in longer program compared to using a subroutine, for the same purpose.
10. ..... is a non-maskable interrupt.
11. 8255 is a .............
12. Pentium Pro is a ..... bit processor.

II. Answer all 9 questions. 9 x 1 = 9 weightage.

14. Give one example each for direct, indirect, immediate and indexed addressing modes.
15. Define MACRO
16. Write any four logic instructions.
17. Give the structure of MACRO definition.
18. Define interrupt.
19. What is DMA?
20. Write the applications of 8259 and 8253.

III. Answer any 5 questions. 5 x 2 = 10 weightage.

22. Give the functional block diagram of 8086.
23. Write an 8086 program to solve the equation $(X+Y) \times (2Y - Z)$, where $X$, $Y$ and $Z$ refers to memory locations (data).
24. Discuss the subroutine call and return.
25. Write an assembly language programme to add two numbers, illustrating the structure of Assembly language program.
26. Write a note on target machine code generation.
27. Explain interrupt I/O.
28. Give the features of 80386.

IV. Answer any 2 questions. $2 \times 4 = 8$ weightage.

29. Write a program to add $n$ 2 byte numbers stored from location X. Use subroutine.
30. Discuss interrupts and interrupt routines in detail.