D 22431. (Pages : 2) Name

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2012

Computer Science

CSC 1C 05—ADVANCED MICROPROCESSOR

(2010 admissions)

Time : Three Hours Maximum Weightage : 36

Part A

Answer **all** *questions.*
Each question carries 1 **weightage.**

1. Draw block diagram of 8085 flags.
2. List the addressing modes in 8086.
3. Define Bus. Explain the significance of clock in a microprocessor.
4. Write any *four* assembler directives.
5. Explain CMPS instruction.
6. Differentiate processing of BCD and binary.
7. What is a scan code ?
8. List any *four* functions of INT 21H.
9. What is a Macro ?
10. List any *four* INT 17H functions.
11. List the registers in 80386.
12. List any *four* features of Power PC.

(12 x 1 = 12 weightage)

Part B

Answer any **six** *questions.*
Each question carries **2 weightage.**

13. Write note on Input Output Processor.
14. Explain interrupt structure of 8086.
15. Explain the assembly process.
16. Write and explain any four program control instructions.
17. Explain any four INT 10H functions giving details such as the action, register status on entry and exit.

Turn over

18. **Write a note on INT 9H operations.**

19. **Write an example of a MACRO program. Explain the working of MACRO call.**

20. **Compare 80386 and 486.**

21. **Explain the major changes in the architecture of PIII compared to PII.**

(6 x 2 = 12 weightage)

Part C

Answer any **three** *questions.*
Each question carries **4** *weightage.*

22. **(a) With the help of a block diagram, explain the register organization of 8086.**

    (b) Differentiate 8086 and 8088.

    (c) What are the different types of instruction in 8086 ? Explain with suitable examples.

23. **(a) Explain fetch-execute cycle.**

    (b) Explain the need for segment registers.

    (c) Discuss the addressing modes of 8085.

24. **(a) Explain how tables can be defined among ALP (Assembly Language Programming'**

    (b) Write ALP to find average and standard deviation of n integers.

25. **(a) Write an ALP to reverse a string.**

    (b) Explain how function/subroutine can be defined and invoked in ALP.

    (c) List and explain any *four* **data transfer instructions which uses indirect addressing.**

26. **(a) Write an example program illustrating how Int 10H can be used for video control.**

    (b) Explain organization of disk.

27. **Discuss in detail the features of P IV.**

(3 x 4 = 12 weightage)