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Reg. No. : .....

Name : .....

Third Semester M.C.A. Degree Examination, May 2009
06.305.1. : SYSTEM PROGRAMMING
(Elective – I)

Time : 3 Hours Max. Marks : 100

Instructions *:a) Answer* ***all*** *questions from Part* ***A****.*
b) Answer ***any two*** *questions from* ***each*** *Module of Part* ***B****.*

PART – A

1. Explain how does a hardware influence a system program.
2. What are the differences between application and system programming ?
3. What are linkers and loaders ?
4. Define addressing modes. What are the addressing modes of SIC machine ?
5. Explain any four assembler directives.
6. What is assembly language program ? Give its structure.
7. What is macro invocation statements ?
8. What is finite automata ?
9. Explain top-down parsing with suitable examples.
10. What is code optimization and what are its types ? **(10×4=40 Marks)**

P.T.O.

PART – B

MODULE – I

11. Write an assembly language program to divide two eight bit data. **10**

12. Explain the architecture of CRAY machine. **10**

13. How does pentium processor differ from other traditional machines ? **10**

MODULE – II

14. Compare MASM assembler with SPARC assembler. **10**

15. Explain linkage editors with a neat block diagram. **10**

16. Explain the design of a loader. **10**

MODULE – III

17. Explain conditional macro expansion in detail. **10**

18. Describe the functions and capabilities of an interactive debugger. **10**

19. Explain various phases of a compiler with neat diagram. **10**

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