

C 1274

Name.....

Reg. No.....



**FOURTH SEMESTER B.TECH. (ENGINEERING) [14 SCHEME] DEGREE
EXAMINATION, APRIL 2016**

CS/IT 14 405—SYSTEMS PROGRAMMING

Time : Three Hours

Maximum : 100 Marks

Part A

1. Explain various databases required in design of two pass assembler.
2. Explain use of Following Instructions :
(i) USING ; (ii) START ; (iii) DC ; and (iv) DS.
3. List out and explain any 5 basic functions used while designing the loader.
4. Define Loader and explain different types of loaders.
5. What do you mean by macro ? list out any 4 macro calls.
6. List out any 4 machine dependent macro processor feature.
7. State the difference between parallel systems and distributed systems.
8. Explain the storage hierarchy with neat diagram.
9. Write short notes on RISC machines.
10. What is meant by absolute loader ?

(8 × 5 = 40 marks)

Part B

11. Explain general Design of the assembler.
Or
12. Explain various databases required in design of two pass assembler. Also write notes on AIX Assembler.
13. Explain the general Design of the loader.
Or
14. Write detailed notes on different types of loader.
15. Discuss about the structure of macro definition table (MDT) and argument list array (ALA) with the help of example.
Or
16. Explain general design of the macro processor.
17. With neat diagram, explain operating System structure.
Or
18. Explain the concept of batch processing, multiprogramming and time-sharing in detail with relevant examples.

(4 × 15 = 60 marks)