Course:	II PUC	**Subject:**	Computer Science(PCMC,ABEC,ABSC)

Max. Marks:	70

Duration:	3:15 hrs.

I. Answer all the questions. Each question carries one mark. 1 X10= 10

1. What is the purpose of south bridge?
2. What are the values of the inputs to a three input NAND gate, if its output is 1?
3. What is binary tree?
4. Which type of data members can be accessed outside the class?
5. Which is the address operator?
6. Write the symbol of entity in E-R diagram.
7. Expand GSM.
8. What is computer virus?
9. What is telnet?
10. What is XML?

II. Answer any five. Each question carries two marks. 2 X 5=10

11. State and prove Absorption law.
12. What is the principle of duality? Give an example.
13. Write any two limitations of OOPS.
14. In which situations the copy constructors are used?
15. What is the use of seekg() and seekp() functions?
16. Write any two application of database.
17. What is a dual table? Write an example.
18. Write difference between LAN and WAN.

III. Answer any five. Each question carries three marks. 3 X 5= 15

19. Explain characteristics of mother board.
20. Write a note on XOR gate with symbol and truth table.
21. Mention the applications of queues.
22. Write the differences between static and dynamic memory allocation.
23. Explain the different modes of opening a file.
24. Briefly explain two tier architecture of DBMS.
25. Explain types of e-commerce.
26. What is web hosting? Mention the various types of web hosting services.

IV. Answer any seven. Each question carries five marks. 7 X 5= 35

27. Prove De-Morgan's laws algebraically.
28. Explain operations performed on stacks.
29. Apply binary search method to the following elements to search element
    13. 3,13,23,33,43
30. Define: a). Data Hiding b). Data Abstraction c). Polymorphism d). Inheritance e). Message Passing
31. What is class definition? Explain with syntax and example.

32. Explain friend function with a programming example.
33. Explain constructor overloading with programming example.
34. Write a note on visibility modes in inheritance.
35. What is data warehousing? Write the stages of data warehousing.
36. What is DDL? Write the functions of DDL.
37. Explain the switching techniques.