



JAIN COLLEGE

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SUBJECT: COMPUTER SCIENCE

**II PUC
MOCK - II**

Timings Allowed: 3 Hrs 15 Minutes

Total Marks: 70

- Instructions:**
- i) Questions paper contains four parts.
 - ii) Part A all questions are compulsory
 - iii) Part B and Part C only five question to be answered.
 - iv) Part C only five questions to be answered.
 - v) Write the question number properly.

PART A

I. Answer all questions

10 X 1 = 10

1. What is data bus?
2. What is universal gate?
3. What is queue?
4. What are the two types of members referenced inside a class?
5. How to initialize a pointer?
6. What is a domain?
7. What is server?
8. What is MODEM?
9. What is Freeware?
10. What is the extension name of hypertext markup language file?

PART B

II. Answer any five of the following.

5 X 2 = 10

11. What is principle of duality? Give an example.
12. Complement the following
 - i) $A'(B'C+BC')$
 - ii) $X'(X+Y')(X'Y)$
13. What is dynamic binding and message passing?
14. Mention the methods through which constructors are invoked?
15. Differentiate between ifstream class and ofstream class.
16. Give an example for relation selection with an example.
17. Classify various SQL operators.
18. Which are the switching technologies used?

PART C

III. Answer any five of the following.

5 X 3 = 15

19. Explain any three components of mother board.
20. Design a circuit to realize $F(A,B,C) = AB + AC' + B'A'C$
21. Define the following with respect to binary tree
 - a) Root
 - b) Depth
 - c) Graph
22. How dynamic memory allocation is different from static memory allocation.
23. Differentiate between read() and write().
24. Mention the applications of data base.
25. Explain URLs.
26. Give the features of XML.

PART D

IV. Answer any seven of the following.

7 X 5 = 35

27. State and prove Associative law and Distributive law.
28. Write an algorithm to delete an element from an array.
29. Write an algorithm to insert an element into a queue.
30. Explain the advantages of OOP.
31. With an example explain how arrays of objects can be declared.
32. Explain the features of copy constructor.
33. Explain the need of function overloading.
34. Explain single inheritance with a suitable C++ program.
35. Explain normalization and its types.
36. Explain SQL constraints with example.
37. Briefly explain networking devices.
