



JAIN COLLEGE

463/465, 18th Main Road, SS Royal, 80 Feet Road, Rajarajeshwari Nagar,
Bangalore - 560 098

Date: December 2017

SUBJECT: Computer Science

**II PUC
Mock I**

Timings Allowed: 3Hrs.

Total Marks: 70

PART A

I. Answer all the questions.

10 X 1 = 10

1. What is a microprocessor?
2. What is truth table?
3. Give an example for linear data structure?
4. Which operator is used to access the members of a class?
5. What is pointer operator?
6. Define attribute.
7. Expand FTP.
8. Define computer network.
9. Expand FLOSS.
10. What is hosting?

PART B

II. Answer any Five of the questions.

5 X 2 = 10

11. Draw a general K-map for 4 variable A, B, C and D.
12. Explain briefly OR logic gate.
13. Define data abstraction.
14. Why are constructors needed in a program? Justify.
15. Differentiate between **read()** and **write()**.
16. List any 3 forms of data.
17. Write the syntax for CREATE command in SQL.
18. Mention different types of network.

PART C

III. Answer any Five of the questions.

5 X 3 = 15

19. Explain types of power supply.
20. What are universal gates? Derive NOT gate from NAND gate.
21. Write an algorithm to delete an element from an array.
22. Differentiate between static memory and dynamic memory.
23. Explain different modes of opening the file in C++.
24. Give broad classification of DBMS users.
25. Give the advantages of WWW.
26. Difference between XML and DHTML.

PART D

IV. Answer any *Seven* of the questions.

7 X 5 = 35

27. State and prove De-Morgan's theorem using proof by perfect induction method only.
28. Write an algorithm to PUSH and POP an element from an array.
29. Explain the memory representations of queue using one dimension array.
30. Describe access specifiers in a class.
31. What is function overloading? What is the restriction on overloaded function? What are the advantages of overloaded function?
32. What are the different methods to call the parameterized constructors? Explain with example.
33. Write a simple C++ program to explain single level inheritance.
34. What is normalization? Explain different normal forms
35. Explain SQL constraints with example.
36. What is network security? Explain the protective methods in details.
37. What is a virus? How to prevent virus?
