



JAIN COLLEGE

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

Date: Dec 2017

SUBJECT: Computer Science

**II PUC
Mock II**

Timings Allowed: 3Hrs.

Total Marks: 70

PART A

I. Answer all the questions.

10 X 1 = 10

1. What is port?
2. Mention universal gates.
3. Define stack.
4. Mention the default access specifiers of a class.
5. What is the other name for address operator?
6. What is data model?
7. Define cookies.
8. Expand CDMA.
9. Define E-Commerce.
10. Define network topology.

PART B

II. Answer any Five of the questions.

5 X 2 = 10

11. Give dual of **a. $1 + X = 1$** **b. $X \cdot X' = 0$**
12. Draw truth table for the Boolean expression $X(X + Y) = X$.
13. Define polymorphism.
14. What is destructor? What is the symbol used for destructor?
15. Differentiate between **get()** and **getline()**.
16. Mention the applications of database.
17. List logical operators in SQL.
18. What is hacking?

PART C

III. Answer any Five of the questions.

5 X 3 = 15

19. Explain characteristics of motherboard.
20. Realize AND, OR, NOT gates using NOR and NAND gates.
21. Difference between linear search and binary search.
22. What is the use of **new** and **delete** operators? Give example.
23. Explain member function associated with file pointers with syntax and example.

24. Explain components of E-R diagram.
25. What are the steps involved in hosting a web page.
26. Mention any 5 network devices.

PART D

IV. Answer any *Seven* of the questions.

7 X 5 = 35

27. Minimize the Boolean expression using K-map $F(A, B, C, D) = \sum(0, 1, 3, 4, 5, 6, 7, 9, 10, 11, 13, 15)$.
28. What are various operations performed on arrays?
29. Write an algorithm to perform Insertion sort.
30. Differentiate between procedural programming and object oriented programming.
31. Explain class definition and class declaration with syntax and example.
32. Explain Inline functions with syntax and example.
33. Explain constructor overloading with example.
34. What is Inheritance? Explain the classifications and also mention which methods are not inherited.
35. What is data warehouse? Explain components of data warehouse.
36. Explain any five aggregate functions in SQL.
37. Explain switching techniques.
