



# JAIN COLLEGE

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

Date: / /2018

SUBJECT: Computer Science

II PUC  
MOCK PAPER - II ( 2018)

Timings Allowed: 3H 15Mins.

Total Marks 70

## PART - A

Answer all the questions

10 X 1 = 10

1. Which is the fastest memory?
2. Mention the universal gates.
3. What is a queue?
4. Define class.
5. How to declare pointers?
6. What is normalization?
7. Expand ARPANET.
8. What are hackers?
9. Define e-commerce.
10. Expand XML.

## PART - B

Answer any five of the following

5 X 2 = 10

11. Define tautology. Give example.
12. Prove algebraically  $X + \bar{X}Y = X + Y$
13. Define data hiding.
14. What is a constructor? Give an example.
15. Differentiate between get () and getline().
16. Differentiate between generalization and specialization.
17. List the different types of SQL commands.
18. List the goals of networking.

## PART - C

Answer any five of the following

5 X 3 = 15

19. Explain cache memory.
20. Derive basic logic gates using NOR gate.
21. Give the memory representation of 2-D array.
22. Explain relationship between array and pointers with example.
23. Explain types of files handled in C++.
24. What are the roles of DBA?

25. Write short note on URL.
26. Explain table tag in HTML.

**PART - D**

**Answer any seven of the following**

**7 X 5 = 35**

27. Reduce using K-Map  $f(A,B,C,D) = \sum(5, 6, 7, 8, 10, 12, 13, 14)$
28. Write an algorithm for insertion sort.
29. Write an algorithm to delete an element from an array.
30. Differentiate between Object Oriented programming and Procedural Oriented programming.
31. What are the characteristics of member function outside a class?
32. Define inline functions. Give advantages and disadvantages of inline function.
33. Define constructor. List the characteristics of a constructor.
34. How does inheritance influence the working of constructor and destructor?
35. Explain data independence in detail.
36. Explain SQL constraints with example.
37. Explain network securities in detail.