JAIN COLLEGE

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

Date:	II PUC MOCK - II	SUBJECT: COMPUTER SCIENCE

Timings Allowed: 3 Hours and 15min   **Total Marks: 70**

PART A

I. Answer __all__ questions   10 X **1** = 10

1. Expand SMPS.

2. Write the logic symbol of AND gate.

3. Which data structure follows LIFO order?

4. Is it possible to access data outside the class?

5. What is free store?

6. What is DBMS?

7. What is a hub?

8. Expand GPRS.

9. What is freeware?

10. What is the use of web page?

PART B

II. Answer any __five__ of the following.   5 X **2** = 10

11. Simplify the Boolean expression XYZ + XYZW + XZ.

12. Write the canonical POS form of the function (A+B) (A+C) (B+C).

13. Define polymorphism and Data encapsulation.

14. Write any two features of constructor?

15. Write any 2 difference between read () and write ().

16. Define entity an attribute.

17. Explain any 2 data types of SQL.

18. Define circuit switching and packet switching.

PART C

III. Answer any __five__ of the following.   5 X **3**= 15

19. What is UPS? Explain its types.

20. What is OR gate> write its logic symbol and truth table.

21. Write an algorithm on linear search.

22. Explain new and delete operator.

23. Explain any 2 file modes.

24. Explain any 3 keys used in database.

25. Write a note on e-commerce.

26. Write the advantages and disadvantages of HTML.

PART D

IV. Answer any <u>seven</u> of the following.   7 X **5** = 35

27. Reduce the following expression using K-Map.

$$F(X,Y,W,Z) = \sum(0,1,3,4,5,6,7,9,10,11,13,15)$$

28. Apply the binary search algorithm on the below given array

10,20,30,35,40,45,50,55,60 search for element=35

29. Write an algorithm to delete an element from a queue.

30. Explain the concept of class and object with example.

31. With an example explain array of objects.

32. Explain inline function with example.

33. Write a program on parameterized constructor.

34. Explain private inheritance with an example

35. Explain CODD's rule.

36. Explain the GROUP BY clause with example.

37. Explain the types of topology.

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