JAIN COLLEGE 463/465, 18th Main Road, SS Royal, 80 Feet Road Rajarajeshwari Nagar, Bangalore - 560 098 SUBJECT: COMPUTER SCIENCE **II PUC** MOCK - I 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 = 101. Expand USB. 2. What is logic gate? 3. What is stack? 4. By default all the members of a class are_____. 5. Mention any one advantage of pointer. 6. What is a relation? 7. What is topology? 8. Expand HTTP. 9. What is proprietary software? 10. What is web scripting? PART B II. Answer any <u>five</u> of the following. 5 X 2 = 1011. Reduce X'Y'Z' + X'YZ' + XY'Z' + XYZ'. 12. Draw a general K-Map for four variables. 13. What is data abstraction and data encapsulation? 14. What is constructor? Give an example. 15. What is stream? Name the stream generally used for file I/O. 16. Classify various types of keys used by in data base. 17. What is dual table? Write a command using dual table. 18. List the goals of networking. PART C III.Answer any <u>five</u> of the following. 5 X 3= 15 19. Explain the types of power supply.

20. Give the definition, truth table and logic symbol of XOR gate.

- 21. Explain the memory representation of one dimensional array.
- 22. What are the advantages of pointer?
- 23. What are the advantages of saving the data in binary form and text form?
- 24. What is a relationship? Classify and give example.
- 25. Write a note on free software.
- 26. Write a note on domain registration.

PART D

IV. Answer any <u>seven</u> of the following.

27. Reduce $F(A,B,C,D) = \sum m(0,2,7,8,10,15)$ using Karnaugh Map. And draw logic gate diagram for the reduced expression.

 $7 \times 5 = 35$

- 28. Explain the operations performed on linear data structure.
- 29. Write an algorithm to insert an element into an array.
- 30. List the real time applications of OOP.
- 31. Explain class definition and declaration with syntax and example.
- **32**. List the rules for writing a constructor function.
- 33. Write a program to find the area of square, triangle and rectangle using function overloading.
- 34. Explain types of inheritance.
- 35. Explain database architecture.
- 36. Write SQL commands for following.
 - a. Create table employee with attributes ENO, ENAME, DESIGNATION, SALARY
 - b. Insert 3 records.
 - c. Display name and salary of all employees in the descending order of their salary.
- 37. Give the measures of preventing virus.
