Jain College, Jayanagar
II PUC Mock Paper -II
Subject: II PUC Computer Science (41)

Duration: 3 hrs 15 minutes **Max. Marks: 70**

PART A

Answer all the questions. Each question carries ONE mark. **1×10=10**

1. What is a disk controller?
2. Define a logic gate?
3. What is a binary tree?
4. Give the syntax to access the member function of a class.
5. Mention any one advantage of pointer.
6. Define database.
7. Expand TCP/IP.
8. What is a computer virus?
9. What is web scripting?
10. Define Telnet.

PART B

Answer any 5 of the following questions. Each question carries TWO marks. **2×5=10**

11. Simplify the following Boolean expression. A B + A + A B
12. State De-Morgan's theorem.
13. Define base class and derived class.
14. What is default constructor? How many default constructors can exist in a class?
15. Mention the different methods of opening a file.
16. Write the advantages of data warehouse.
17. Classify the built-In functions in SQL.
18. Give the difference between half duplex and full duplex.

PART C

Answer any 5 of the following questions. Each question carries THREE marks. **3×5=15**

19. What is UPS? Explain different types of UPS.
20. Draw the logic circuit diagram for the following expression
    1. (A+B-C)/D*E
    2. A+B-C
    3. (X+Y)/Z

21. Convert the following infix expression to postfix expression
22. Differentiate call by value and call by reference.
23. Explain different methods of opening a file in C++.
24. Write the advantages and disadvantages of index sequential file organization.
25. Classify and explain servers.
26. Explain any 3 tags used with forms.

PART D

Answer any 7 of the following questions. Each question carries FIVE marks. 5×7=35

27. What is K-map? Explain pair reduction rule and quad reduction rule with an example.
28. Write an algorithm to search an element in an array using binary search.
29. What are the operations of non primitive data structures? Explain.
30. Explain the characteristics of OOP.
31. How are objects passed as arguments to a function? Give an example.
32. Explain friend function and their characteristics.
33. Explain parameterized constructor with syntax and example.
34. Explain the types of inheritance with example.
35. Explain indexed sequential file organization.
36. Explain alter table command with example.
37. Explain the different topologies in network.

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