

Surana Ind. PU College

Preparatory - 4

Subject: II PUC Computer Science (41)

Duration: 3 hrs 15 minutes

Max. Marks: 70

PART A

Answer all the questions. Each question carries ONE marks.

1×10=10

1. Expand DDRAM.
2. What is tautology?
3. Define linked list.
4. What is an object pointer?
5. Define indirection operator.
6. What is relation?
7. Define computer network.
8. What is SIM card?
9. What is FLOSS?
10. Mention the use of HTML.

PART B

Answer any 5 of the following questions.

2×5=10

11. Write the logic symbol and Truth table of NOR gate.
12. Find the minterm and max term.
13. Define Dynamic binding and data encapsulation.
14. Why the constructors are needed in a program? Justify.
15. Differentiate text file and binary file.
16. Explain any 2 components of E-R model.
17. Explain distinct Key word with example.
18. Mention different network switching techniques.

PART C

Answer any 5 of the following questions.

3×5=15

19. Mention the components of motherboard.
20. What are universal gates? Write truth table and standard symbol of NAND gate.
21. Define the following terms with respect to binary tree.
(i)Root (ii) Edge (iii) complete tree
22. Define the terms 1) abstract class 2) Pure virtual function.
23. Explain the following functions with respect to files.
(i)eof() (ii) seekp() (iii) tellg().
24. Explain 2-tier database architecture.
25. Write the services of networking.
26. Give the difference between HTML and XML.

PART D

Answer any 7 of the following questions.

5×7=35

27. State and prove any 5 different Boolean theorems.
28. What are primitive data structures? Explain the operations
29. Write an algorithm to delete a data element from an array.
30. Explain different Object oriented Concepts
31. Explain constructors and characteristics of constructors
32. What is function overloading? Explain with a programming example
33. Write a class program to find the occurrence of an element of a given array
34. Create a base class containing the data members roll number and name. Also create a member function to read and display the data using the concept of single level inheritance. Create a derived class that contains marks of two subjects and total marks as the data members.
35. Write a note on Indexed sequential organization.
36. Explain DDL and DML commands in SQL with syntax and example
37. Explain the different transmission media in networks.
