

# Jain College, Jayanagar

## II PUC Mock Paper -I 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.

 $1 \times 10 = 10$ 

- 1. Expand DDRRAM.
- 2. What is tautology?
- 3. Define linked list.
- 4. Write an example to show how objects can be used as function arguments.
- 5. Define indirection operator.
- 6. What is relation?
- 7. Name the first 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. Each question carries TWO marks.

 $2 \times 5 = 10$ 

- 11. Write the logic symbol and Truth table of NAND gate.
- 12. Find the minterm designation of xyz.
- 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. List the data types supported in SQL.
- 18. Mention different networking techniques.

#### **PART C**

## Answer any 5 of the following questions. Each question carries THREE marks.

 $3 \times 5 = 15$ 

- 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. What is new operator in c++? Explain with an example.
- 23. Explain the following functions with respect to files.
  - (i)eof()
- (ii) seekp()
- (iii) tellg().
- 24. Explain 1-tier database architecture.
- 25. Write the goals of networking.
- 26. Give the difference between HTML and XML.

#### PART D

## Answer any 7 of the following questions. Each question carries FIVE marks.

5×7=35

- 27. State the different Boolean theorems.
- 28. What are primitive data structures? Explain the operations that we can perform on primitive data structure.
- 29. Write an algorithm to delete a data element from the front end of the queue.
- 30. Write the difference between procedural oriented programming and object oriented programming.
- 31. Explain the use of an array of objects with an example.
- 32. What is function overloading? Write the advantages of function overloading.
- 33. What is default constructor? Explain with an example.
- 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 short note on normalization.
- 36. Explain DDL and DML commands in SQL.
- 37. Explain the different transmission media in networks.

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