PART - A

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

1. What is address bus?

2. Name any one universal gate.

3. What is binary tree?

4. Define member function.

5. What is memory leak?

6. Define entity.

7. What is intranet?

8. Expand SLIP.

9. What id open source software?

10. What is XML?

PART - B

II. **Answer any FIVE questions. Each question carries TWO marks.** **5 x 2 = 10**

11. State the principle of Duality.

12. What is the canonical form of Boolean expression? Mention the types of canonical expression.

13. Explain polymorphism.

14. Why are constructors needed in program? Justify.

15. Write syntax and example to create a file using constructors.

16. Explain any 2 Codd's rules.

17. Explain numeric functions used in SQL.

18. Write the differences between LAN and WAN

PART - C

III. **Answer any FIVE questions. Each question carries THREE marks.** **5 x 3 = 15**

19. Explain different components of motherboard.

20. Explain NOR gate with truth table and logic diagram.

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

22. Differentiate between static and dynamic memory allocation.

23. What are the advantages of binary file?

24. Define a) Alternate key   b) Composite key   c) Candidate key.

25. What are the advantages of e-commerce.

26. Write a note on URL.

PART - D

IV.   **Answer any SEVEN questions. Each question carries FIVE marks.**   **7 x 5 = 35**

27.   Given the expression in four variables P,Q,R,S. Reduce the expression using K-map.

$m_0 + m_2 + m_4 + m_8 + m_9 + m_{10} + m_9 + m_{11} + m_{12} + m_{13}$

28.   What is primitive data structure? Explain the operations performed on primitive data structure.

29.   Write an algorithm to insert an element in an array.

30.   Explain: (a) inheritance b) Polymorphism c) Data Abstraction d) Data encapsulation

      e) Message passing

31.   What is class definition and declaration? Write its syntax and example.

32.   Explain advantages and disadvantages of function overloading.

33.   Explain copy constructor with an example.

34.   What is inheritance? Write advantages of inheritance.

35.   Write a note on Data Mining.

36.   Explain (a) CREATE   b) ALTER   C) DESC command.

37.   Write a note on network security.

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