



Part-A

I. Answer all the questions. Each question carries 1 mark.

1×10=10M

1. What is motherboard?
2. Give the dual form of $X + \bar{Y} = 1$.
3. Define data structure.
4. Which type of data members are accessible outside a class.
5. What is the use of new operator in C++?
6. Define cardinality.
7. Define hackers.
8. What is chatting?
9. Define e-commerce.
10. Give an example for web browser.

Part-B

II. Answer any 5 questions. Each question carries 2 marks.

2×5=10M

11. State and prove associative law of addition.
12. Write the complement of $X + \bar{X}Y = \bar{X} \bar{Z}$.
13. Define function overloading and message passing.
14. What is a destructor? Write the syntax for declaring a destructor function.
15. Differentiate between get() and getline()
16. Explain any 2 relational keys used in DBMS.
17. Explain any 2 features of SQL.
18. Mention the goals of networking.

Part-C

III. Answer any 5 questions. Each question carries 3 marks.

3×5=15M

19. Explain different types of power supply.
20. Write logic circuit diagram for the expression $Y=AB+\bar{B} C+(\bar{C}A)$.
21. Explain the memory representation of 2D array.
22. Write a note on pointer with respect to arrays.
23. What is a file? Name the stream classes supported by C++ for file input and output.
24. Explain the 3 levels of DBMS architecture.
25. Define the following :
 - a. URL
 - b. Freeware
 - c. OSS
26. Give the features of DHTML.

Part-D

IV. Answer any 7 questions. Each question carries 5 marks.

7×5=35M

27. Using K-map simplify the following expression
 $F=\sum(m_0, m_2, m_4, m_8, m_9, m_{10}, m_{11}, m_{12}, m_{13})$
28. Write an algorithm to arrange the given array elements in ascending order using insertion sort technique.
29. Explain the applications of Queue.
30. Write the differences between Procedural Programming and Object Oriented Programming.

31. Explain array of objects with example
32. Write a note on inline function.
33. Write the rules for writing a constructor function.
34. Write a C++ program to describe single level inheritance.
35. Give the different notations used in E-R diagram.
36. Write the differences between Order By and Group By with an example.
37. What is virus? Write the measures for preventing virus.
