I. Answer all the questions. Each question carries one mark.   1 X10= 10

1. What is purpose of IDE port?
2. For the truth table given below, what type of logic gate does the output F represents

X	Y	F
0	0	1
0	1	1
1	0	1
1	1	0

3. What is linked list?
4. What is array of objects?
5. What is the size of a pointer variable?
6. Give the symbolic notation for projection.
7. Expand GPRS
8. What is SIM card?
9. What is Telnet?
10. What is a Web scripting?

II   Answer any five. Each question carries two marks.   2 X 5=10

11. Write any 2 boolean postulates with proof.
12. Convert the following expression to canonical SOP form: YZ + XY
13. Explain object oriented programming.
14. Write the disadvantages of default constructor.
15. Write the difference between tellp() and tellg() functions.
16. Explain hierarchical database model.
17. Give the Syntax and example of DELETE command.
18. Write a note on optical fibers.

III   Answer any five. Each question carries three marks.   3 X 5= 15

19. Explain the characteristics of motherboard.
20. Explain XOR gate.
21. Write the application of stacks.
22. Explain 1. Free store 2. Orphaned memory block 3. Memory leak.
23. Write the basic operations performed on binary file
24. Explain Hierarchical database model.
25. What is a web browser? Mention any two web browsers
26. Write the features of XML

IV   Answer any seven. Each question carries five marks.   7 X 5= 35

27. Prove Demorgans's law I and II in algebraic method.
28. Explain briefly the classification of data structures.
29. Write an algorithm insert an element to an array and delete an element from an array.
30. Write the limitations of OOPs..
31. What is an object? How to create an object? Explain with syntax and example
32. Explain the features of friend functions.
33. Explain initialization of object during declaration with assignment operator.
34. Write a note on visibility modes in inheritance.
35. Explain the stages of data processing cycle.
36. What is DML? Explain the different DML commands
37. Explain any five types of topology