MODEL QUARTERLY EXAMINATION

CLASS : 11 **TYPE:C** MARKS : 70

SUBJECT: COMPUTER SCIENCE TIME : 3 HRS

I. CHOOSE THE CORRECT ANSWER: 15 X 1 = 15

1. Identify the input device
   (A) Printer (B) Mouse (C) Plotter (D) Projector
2. How many bytes does 1 KiloByte contain?
   (A) 1000 (B) 8 (C) 4 (D) 1024
3. Which is a basic electronic circuit which operates on one or more signals?
   (A) Boolean algebra (B) Gate
   (C) Fundamental gates (D) Derived gates
4. How many memory locations are identified by a processor with 8 bits address bus at a time?
   (A) 28 (B) 1024 (C) 256 (D) 8000
5. What is the capacity of 12cm diameter DVD with single sided and single layer?
   (A) 4.7 GB (B) 5.5 GB (C) 7.8GB (D) 2.2 GB
6. Operating system is a
   (A) Application Software (B) Hardware
   (C)System Software (D)Component

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7. An example for single task operating system is
   (A)Linux (B) Windows (C)MS-DOS (D) Unix
8. From the options given below, choose the operations managed by the operating system.
   (A) Memory (B) Processes
   (C) Disks and I/O devices (D) All of the above
9. The shortcut key used to rename a file in windows
   (A) F2 (B) F4 (C) F5 (D) F6
10. Omitting details inessential to the task and representing only the essential features of the task is known as
    (A) specification (B) abstraction (C) composition (D) decomposition
11. Which of the following properties is true after the assignment at line 3?
    1 --i, j = 0, 0
    2 i, j := i+1, j-1
    3 -- ?
    (A) i+j >0 (B) i+j < 0 (C) i+j =0 (D) i = j
12. If m x a + n x b is an invariant for the assignment a, b : = a + 8, b + 7, the values of m and n are

(A) m = 8, n = 7 (B) m = 7, n = -8 (C) m = 7, n = 8 (D) m = 8, n = -7

13. Which of the following is not a data type modifier?
(A) signed (B) int (C) long (D) short
14. Which of the following operator is inseration operator in C++?
(A) >> (B) << (C) <> (D) ^^
15. Which of the following is called exit control loop?
(A) do-while (B) switch (C) while (D) if-else

II. Answer the following questions: (Any 6)
Q.No:24 Compulsory **6 X 2 = 12**

16. What are the components of a CPU?
17. Write the 1's complement procedure.
18. What is a program counter?
19. What is multi-processing?
20. How will you Rename a File?
21. What is recursive problem solving?
22. What is an invariant?
23. What is meant by a token? Name the token available in C++.
24. What will be the output of the following code:

```
int year;
cin >> year;
if (year % 100 == 0)
        if ( year % 400 == 0)
                cout << "Leap";
        else
                cout << "Not Leap year";
```

If the input given is (i) 2014 (ii) 2017 (iii) 2024?

III. Answer the following questions: (Any 6)
Q.No:33 Compulsory **6 X 3 = 18**

25. Name any three output devices.
26. Convert $(255)_{10}$ into Binary, then convert that Binary number to Octal.
27. Write a short note on XNOR gate.
28. Differentiate PROM and EPROM.
29. List out the key features of Operating system
30. What are called standard icons?
31. Differentiate "=" and "==".
32. Write the syntax for while statement.
33. What is case analysis?

IV. Answer in Detail: **5 X 5 = 25**

34. Explain the generation of Computer. (OR)
a) Add $1101010_2+101101_2$ b) Subtract $1101011_2 - 111010_2$
35. Explain the characteristics of a microprocessor. (OR)
Explain the process management algorithms in Operating System.
36. Explain the various versions of Windows OS. (OR)
What are the types of Errors?
37. Explain if..else statement with suitable example. (OR)
Arrange the memory devices in ascending order based on the access time.
38. Explain the different ways of finding a file or Folder. (OR)
What is an entry control loop? Explain any one of the entry controlled loop with suitable example.

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