



I. Answer any 5 of the following questions:

[5 x 2 = 10]

1. Write the functions of memory unit?
2. List the encoding systems that represents characters in memory.
3. Write a short note on NAND Gate.
4. What are the security management features available in Operating System?
5. How will you rename a File?
6. Specify a function to find the minimum of two numbers.

II. Answer any 5 of the following questions:

[5 x 3 = 15]

7. Differentiate optical and laser mouse
8. What is radix of a number system? Give example
9. Differentiate PROM and EPROM
10. Write a note on Multiprocessing
11. Write the two ways to create a new folder.
12. What is the format of the specification of an algorithm?

III. Answer any 5 of the following questions:

[5 x 5 = 25]

13. Explain the following:
a) Inkjet Printer b) Multimedia projector c) bar code/ QR code
14. a) Add 11010102+1011012 b) Subtract 11010112 - 1110102
15. Explain the types of ROM.
16. Explain the process management algorithms in Operating System.
17. Explain the versions of Windows Operating System.
18. Suppose you want to solve the quadratic equation $ax^2 + bx + c = 0$ by an algorithm.

quadratic solve (a, b, c)

-- inputs : ?

-- outputs: ?

You intend to use the formula and you are prepared to handle only real number roots. Write a suitable specification.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

-----ALL THE BEST-----

Test should be written under the supervision of your parents and get the answer paper signed from them.

No corrections should be made after the test timings. We expect your honesty.

Test Papers have to be submitted after the completion of all the 4 tests.

Submission Date of Test Papers: 27th July, 28th July, 29th July

Timings: 9.30 AM – 1.00 PM / 5 PM- 8 PM