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FIRST SEMESTER (CBCSS—UG) DEGREE EXAMINATION, NOVEMBER 2021 Computer Science
(2019 to 2020 Admissions)

Time : Two Hours

Maximum : 60 Marks

## Section A (Short Answer Type Questions)

Answer all questions.
Each correct answer carries a maximum of 2 marks. Ceiling 20 marks.

1) Define BIT and BYTE.
2) What do you mean by number system?
3) What is Hamming Code?
4) Convert the following :
a) $(67110)_{10}$ to binary.
b) $(10110011)_{2}$ to decimal.
5) Write the truth table and logic symbol of NAND gate.
6) What is Memory? State its type.
7) Write the four rules of Binary Addition.
8) Subtract the following 4-bit binary numbers.
a) $1011_{2}-1001_{2}$.
b) $1100_{2}-0110_{2}$.
9) What are the different types of printers?
10) Mention different secondary storage devices.
11) How a light pen is used as an input device?
12) Discuss in brief the purpose of Program planning.

> Section B (Short Essay Type Questions)
> Answer all questions.
> Each correct answer carries a maximum of 5 marks. Ceiling 30 marks.
13) Construct OR gate using any of the universal gates.
14) Define the characteristics of computer.
15) Write the laws of Boolean algebra.
16) Describe various input devices of computer system.
17) Write the difference between a full adder and half adder.
18) List the hierarchy of computer memory with diagram.
19) Discuss any five Control devices.

## Section C (Essay Type Questions)

Answer any one question, correct answer carries 10 marks.
20) List any two uses of :
a) Scanner.
b) Web Camera.
c) Mouse.
e) MIDI.
d) Touch Screen.
21) Compare and contrast the Algorithm and Flowchart.

