**D 13580** **(Pages : 2)** **Name.....**

**Reg. No.....**

**FIRST SEMESTER (CBCSS—UG) DEGREE EXAMINATION, NOVEMBER 2021**

Computer Science

BCS 1C 01—COMPUTER FUNDAMENTALS

(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.

**Turn over**

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.

(1 × 10 = 10 marks)