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) 1011₂ 1001₂.
 - b) 1100₂ 0110₂.
- 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.

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- 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.

 $(1 \times 10 = 10 \text{ marks})$