H   Roll No. ....

TBC–101/TBD–101

B.C.A. (FIRST SEMESTER)
MID SEMESTER
EXAMINATION, Oct., 2023

COMPUTATIONAL THINKING AND
FUNDAMENTALS OF IT

Time : 1½ Hours

Maximum Marks : 50

Note : (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each sub-question carries 10 marks.

1. (a) Define computational thinking. Explain how it is helpful in developing Logical thinking ?   (CO1)

OR

(b) Explain types of Data used in Computational thinking with suitable example.   (CO1)

P. T. O.

2. (a) Write the steps to solve Classic Puzzle solving. How is it different from General Problem solving ?   (CO1)

OR

(b) Discuss the basic difference between Information and Data. Explain an example.   (CO1)

3. (a) How algorithm is different from Pseudo code ? Is Pseudo code is better than algorithm. Elaborate.   (CO1)

OR

(b) What do you mean by flowchart ? Explain all the symbols used in flowchart with their diagrams. Write its advantages also.

(CO1)

4. (a) Draw a Flowchart of first five multiples of number 7.   (CO2)

OR

(b) Differentiate between Sequential, Branching and Looping flowcharts. (CO2)

5. (a) What do you mean by an Algorithm ? Write the characteristics of an algorithm.

(CO2)

OR

(b) Which algorithm among Sequencing, Selection and Iteration is the best ? Describe briefly.   (CO2)