



Mid Term (Odd) Semester Examination October 2024

Roll no. 2492525

Name of the Course and semester: BCA, Sem I

Name of the Paper: Computational Thinking and Fundamentals of IT

Paper Code: TBC101

Time: 1.5 hour

Maximum Marks: 50

Note:

- (i) Answer all the questions by choosing any one of the sub questions
- (ii) Each question carries 10 marks.

Q1.

(10 Marks)

- a. What is computational thinking? Define the key components of computational thinking. CO1
- OR
- b. What do you mean by flowchart? Explain various symbols used in flow chart. CO2

Q2.

- a. Differentiate data and information. Explain various data types in detail. CO1
- OR
- b. Explain the types of flow charts. Draw a flow chart to find the sum of even numbers between 1 to 100. CO2

Q3.

(10 Marks)

- a. What is an algorithm? Explain the characteristics of a good algorithm. Give example. CO2
- OR
- b. What are pseudocodes? Write pseudocode for calculating area of a circle. CO1

Q4.

(10 Marks)

- a. Draw a flowchart to find the greatest number among three numbers. CO2
- OR
- b. What are the steps of effective problem solving? Explain with a real-life example. CO1

Q5.

(10 Marks)

- a. Explain the types of algorithm with suitable example. CO2
- OR
- b. Differentiate between algorithm and pseudocode. CO1