



Term Evaluation (Even) Semester Examination March 2025

Roll no.

Name of the Course and semester: BCA 2

Name of the Paper: Fundamentals of Python Programming

Paper Code: TBC211

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.
- (iii) Please specify COs against each question.

Q1. (10 Marks) CO1
a. Who is the creator of Python, and what were the primary objectives behind its development? Provide a brief overview of Python's evolution from its initial versions to the present.

OR

- b. Write short notes on any three
- (i) Indentation
 - (ii) Multiline comments in python
 - (iii) print()
 - (iv) input()

Q2. (10 Marks) CO1, CO2

- a. What are the various numerical data types in Python? Describe each type with an example.

OR

- b. What is a module in Python? Create a custom module mathsample.py with functions for addition, subtraction, multiplication, and division. Import and use these functions in another script.

Q3. (10 Marks) CO1
a. Write a Python program that prompts the user to enter a number and determines whether it is positive, negative, or zero using an if-elif-else statement.

OR

- b. Differentiate between a for loop and a while loop with suitable examples. Write a Python program that prints all even numbers from 1 to 20 using a for loop and range().

Q4. (10 Marks) CO1, CO2
a. Write a Python program that converts a decimal number into binary, octal, and hexadecimal formats.

OR

- b. What are strings in Python? Explain how slicing works in Python strings with examples.

Q5. (10 Marks) CO2
a. What are mutable and immutable data types in Python? Classify strings, lists, and dictionaries accordingly.

OR

- b. What is dictionary in python? how to create, access, update, delete and retrieve keys and values in dictionary?