



Mid Term (Odd) Semester Examination October 2024

Roll no. 23A2164

Name of the Course and semester: BCA 3

Name of the Paper: Python Programming

Paper Code: TBC-304

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. Discuss the advantages of Python compared to traditional programming languages. (CO1)
OR
- b. Demonstrate how the Python Interpreter and Interactive Mode work with an example. (CO1)

Q2. (10 Marks)

- a. Describe the various types of operators in Python and provide examples for each. (CO1)
OR
- b. Describe break, continue and pass statement in python with example. (CO1)

Q3. (10 Marks)

- a. List the various data types in Python and explain each with an example. (CO1)
OR
- b. Differentiate between for loop and while loop. Write a program to find the prime numbers between the range of 99 – 150. (CO1)

Q4. (10 Marks)

- a. Use the split() method in Python to write a program that takes user input and breaks the string at every occurrence of the character 'p'. (CO2)
OR
- b. Design a Python program to create a list of six integers, then apply the sort(), reverse(), pop(-1), and insert(4, 69) methods. (CO2)

Q5. (10 Marks)

- a. Explain what a dictionary is in Python and provide code examples of five commonly used dictionary methods. (CO2)
OR
- b. Describe file handling in Python and critically analyze the different file-handling modes, illustrating with examples for each mode. (CO2)