

NOTE: 1. Figure should be neat and labelled
2. All questions are compulsory
3. Right side indicates marks

1. Answer the following (Attempt any four) [20 marks]
 - a. Explain programming language paradigms.
 - b. Write an algorithm and draw a flowchart to find simple interest.
 - c. Describe translator and its types.
 - d. What are different data types in python.
 - e. Explain relational, arithmetic, logical, assignment operators in detail.
 - f. Write a program to calculate perimeter and area of rectangle in python.
 - g. Write any 5 built-in functions in python with syntax and example.
 - h. Describe various structure of a program in detail.
2. Answer the following (Attempt any four) [20 marks]
 - a. Write a program to display an item list at index value 2 and delete that item.
 - b. Write a program to swap items in two list.
 - c. Explain `isalnum()`, `istitle()`, `replace()` with examples.
 - d. Describe break and continue statement using program.
 - e. Explain basic syntax of for loop with an example.
 - f. Describe nested if statement with an example.
 - g. Write while loop with an example.
 - h. Write a program to show if-else statement.
3. Answer the following (Attempt any four) [20 marks]
 - a. Show difference between local and global variable using program.
 - b. Describe anonymous function in python.
 - c. Write a function to calculate area of triangle and call the function.
 - d. Create grocery module and import that module in the program.
 - e. How to merge two dictionaries.
 - f. Explain key value pair in a dictionary with example.
 - g. Explain time module in python.
 - h. Explain function with keyword arguments.