

- 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.