**Q.1 Answer the following.(Attempt any four)**                    [20marks]

   a. What is translator? Explain its types.

   b. Define programming language and explain its characteristic.

   c. Explain any 5 built in functions in python.

   d. Describe structure of a program.

   e. Write an algorithm and draw a flowchart to find factorial of a given number.

   f. Explain different data types in python.

   g. Explain relational and assignment operators in detail.

   h. Write a program to demonstrate basic input and output statements in python.

**Q.2 Answer the following.(Attempt any four)**                    [20marks]

   a. Write a program to determine whether the given number is even or odd.

   b. Explain nested if statement with an example.

   c. Explain while loop with an example.

   d. Describe basic syntax of for loop with an example.

   e. Explain break and continue statement.

   f. Write a program to update a list at index value 2.

   g. Write a program to swap items in two tuples..

   h. Explain isalnum(),upper(), replace() with examples.

**Q.3 Answer the following.(Attempt any four)**                    [20marks]

   a. Write a program in python to merge two dictionaries.

   b. What is a dictionary? Explain with example.

   c. Explain random module in python.

   d. Define functions and give its advantages.

   e. Write a program to differentiate between local and global variable.

   f. Describe lambda function in python.

   g. Write a function to calculate area of circle and call the function.

   h. Create a bill module and import that module in python.

**Q.4 Answer the following.(Attempt any three)**                    [15marks]

   a. Write a program to input 5 employees salary and find minimum and maximum salary among 5 employees using tuples.

   b. Explain any five dictionary methods.

   c. Explain any 5 tuple operations.

   d. Write a program to display table of 2.

   e. Explain need for algorithm.

   f. Using for loop, write program that prints out the decimal equivalent of ½,1/4…