



PART B — (5 × 16 = 80 marks)

11. (a) (i) Compare and contrast machine language, assembly language and high-level language in detail.
- (ii) Give the difference between recursion and iteration.

Or

- (b) Explain in detail about the Notation of Algorithm.
12. (a) What is the role of an interpreter? Give a detailed note on python interpreter and interactive mode of operation. Explain how Python works in interactive mode and script mode with examples.

Or

- (b) Explain in detail about precedence of python operators and the associativity of python operators.
13. (a) Write a Python program to find the square root of a number without using inbuilt function and explain the same.

Or

- (b) Write a Python program for linear search and binary search and explain its implementation in detail.
14. (a) Demonstrate with Python code the various operations that can be performed on tuples.

Or

- (b) Define Dictionary in python. Do the following operations on dictionaries.
- (i) Initialize two dictionaries with key and value pairs.
- (ii) Compare two dictionaries with master key list and print missing keys.
- (iii) Find keys that are in first and not in second dictionary.
- (iv) Find same keys in two dictionaries.
- (v) Merge two dictionaries and create a new dictionary using a single expression.

15. (a) Explain about the file reading and writing operations using format operator with python code.

Or

- (b) Write a Python program to dump objects to a file using pickle.