Question Paper Code : 60035

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2022.

First Semester

Civil Engineering

GE 3151 – PROBLEM SOLVING AND PYTHON PROGRAMMING

(Common to : All Branches)

(Regulations 2021)

Time : Three hours
Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Write an algorithm to find smallest among three numbers.

2. Which is better iteration or recursion? Justify your answer.

3. List any four built in data types in Python.

4. How do you assign a value to a tuple in Python?

5. What are the purposes of pass statement in Python?

6. What is Linear Search?

7. Give examples for mutable and immutable objects.

8. What is purpose of dictionary in Python?

9. List any four file operations.

10. Write a python program to Count Words in a sentence using spilt () function.

PART B — (5 × 16 = 80 marks)

11. (a) List out the control flow statements in Python and explain repetition type in detail with a sample program.

Or

(b) What is recursion? Write and explain a Python program to find factorial of number using recursion.

12. (a) Why do we call python as interpreted and object-oriented programming language? Also explain about Interactive Python.

Or

(b) Write and explain the python program to swap two numbers with and without temporary variables.

13. (a) What is difference between break and continue in Python? Explain with suitable examples.

Or

(b) What is string function in Python? Explain any three Python string methods with an example.

14. (a) Define Python Lists. How to add elements to the list? Explain with a suitable example program.

Or

(b) Explain bubble sort algorithm using python programming.

15. (a) Why does Python require file handling? Explain opening files in python with all modes.

Or

(b) Give a brief notes on Python Exception Handling using try, except, raise and finally statements.

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