Roll No. .....

3331

B. Tech. 6th Semester (ECE)

(Open Elective - II)

Examination – May, 2023

PYTHON PROGRAMMING

Paper : OEC-ECE-318-G

Time : Three Hours] *[Maximum Marks : 75*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

1. Explain the followings : 6 × 2.5 = 15

(a) Rules of Precedence to evaluate an expression in Python.

(b) Rules to declare variables with examples.

(c) Dictionary in Python.

(d) Program Structure in Python.

(e) Abstract class in Python with example.

(f) Built-in string manipulation functions/methods with examples (any two).

UNIT – I

2. (a) What are control statements in Python ? Explain nested if statement using suitable examples. 8

   (b) Write the algorithm & Python program to find minimum of 20 numbers of a list. 7

3. (a) Describe various operators available in Python with examples. 8

   (b) Write the algorithm & Python program to check if number is palindrome or not. 7

UNIT – II

4. (a) What are control statements in Python ? Explain nested if statement using suitable examples. 8

   (b) Write the algorithm & Python program to find the sum of digits of a number. 7

5. (a) What do you understand by loop structure in Python ? Discuss "for loop", its syntax with examples. 8

   (b) Write a Python Program to accept the sentence from the user and display the longest word of that sentence along with its length. 7

UNIT – III

6. (a) Illustrate basic list operators used in Python using suitable examples. 8

   (b) Write algorithm and python program to search a specific value from the given list of values using Linear Search method. 7

7. (a) Define recursive function in python. Differentiate direct and indirect recursion with suitable examples. 8

   (b) Write algorithm & python program to find the Fibonacci series using recursive function. 7

UNIT – IV

8. Discuss inheritance feature of python with suitable examples. Also appraise the use of method overriding mechanism with syntax. 15

9. (a) Explain the concept of operator overloading and polymorphism in Python with suitable example. 8

   (b) Create a class employee with data members : empcode, empname, empdeptt, cityresidence and salary. Create suitable method's for initialization/ reading and displaying employee information. 7
