

Reg. No.																			
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Question Paper Code	12534
---------------------	-------

B.E./B.Tech - DEGREE EXAMINATIONS, NOV / DEC 2023

Second Semester

Electronics and Communication Engineering

(Common to Electrical and Electronics Engineering, Mechanical Engineering, Mechanical and Automation Engineering & Computer and Communication Engineering)

20ESIT201 - PYTHON PROGRAMMING WITH LABORATORY

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

- | | <i>Marks,
K-Level, CO</i> |
|---|-------------------------------|
| 1. Compare interpreter and compiler. | 2,K1,CO1 |
| 2. List the standard data types in python. | 2,K1,CO1 |
| 3. Illustrate the flow chart of if-elif-else statements. | 2,K3,CO2 |
| 4. Write a python program to print the square root of a given number. | 2,K3,CO2 |
| 5. What is Dictionaries? Give any two methods. | 2,K1,CO3 |
| 6. Define List. | 2,K1,CO3 |
| 7. Define Fruitful Functions. | 2,K1,CO4 |
| 8. Define module. Give an example. | 2,K2,CO4 |
| 9. Differentiate Object variable and Class variable | 2,K2,CO5 |
| 10. What is the use of self keyword? | 2,K2,CO5 |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) List and explain the various operators in Python with example. 13,K2,CO1
- OR**
- b) (i) Illustrate a program to perform Addition, Subtraction, Multiplication, Division, Integer Division and Modulo Division on two integer numbers. 7,K2,CO1
- (ii) Demonstrate a program to calculate area of a circle. 6,K2,CO1
12. a) Explain in detail about Looping statements in detail with example in Python. 13,K2,CO2
- OR**
- b) (i) Write a python program to print the first 50 prime numbers. 6,K2,CO2
- (ii) Write a python program to find the factorial of a given number. 7,K2,CO2

13. a) What is a Dictionary? Explain dictionaries in detail discussing its operations and methods with example programs. *13,K2,CO3*

OR

- b) (i) Python strings are immutable. Illustrate with an example. *7,K2,CO3*
(ii) Write a python code to perform binary search. Show it with an example of your choice. *6,K2,CO3*

14. a) Write a Python Program to Implement Arithmetic Operations using Modules. *13,K1,CO4*

OR

- b) (i) Write a program using function to find the Max of three numbers. *6,K2,CO4*
(ii) Write a program using functions and return statement to check whether a number is even or odd. *7,K2,CO4*

15. a) Explain about how Exceptions are handled with example. *13,K3,CO5*

OR

- b) Explain in detail about Object Oriented Programming Concept and Illustrated with an Example Program. *13,K3,CO5*

PART - C (1 × 15 = 15 Marks)

16. a) (i) Illustrate the use of Python functions for finding the GCD of two given numbers. *8,K1,CO6*

- (ii) Illustrate the use of python function for Fibonacci series generation Program in Python. *7,K1,CO6*

OR

- b) Construct a package named Student. Initialize the package and add two modules in two separate files. Module 1 represents the personal details of the student and Module 2 represents the marks of each student. Write the main file, import two modules and display the details of all students. *15,K2,CO6*