

**B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2025**

Second Semester

**Electronics and Communication Engineering**

(Common to Mechanical Engineering)

**20ESIT201 - PYTHON PROGRAMMING WITH LABORATORY**

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

**PART - A (MCQ) (10 × 1 = 10 Marks)**

Answer ALL Questions

- |  | <i>Marks</i> | <i>K-Level</i> | <i>CO</i> |
|--|--------------|----------------|-----------|
| 1. Which keyword is used for conditional statements in Python?<br>(a) while (b) for (c) if (d) switch  | 1            | K1             | CO1       |
| 2. What is the correct way to declare a variable in Python?<br>(a) variable name = value (b) name = value<br>(c) set name = value (d) declare name = value   | 1            | K1             | CO1       |
| 3. _____ is the output of the following code?<br>for i in range(1, 6):<br>if i == 3:<br>continue<br>print(i)<br>(a) 1 2 (b) 1 2 3 (c) 1 2 4 5 (d) 1 2 4  | 1            | K2             | CO2       |
| 4. What is the purpose of the for loop in Python?<br>(a) To execute a block of code repeatedly until a condition is false<br>(b) To iterate over items in a sequence<br>(c) To execute a block of code a fixed number of times<br>(d) To define a function | 1            | K1             | CO2       |
| 5. Which method is used to split a string into a list of substrings based on a delimiter in Python?<br>(a) split() (b) substring() (c) separate() (d) divide()   | 1            | K1             | CO3       |
| 6. Suppose t = (1, 2, 4, 3), which of the following is incorrect?<br>(a) print(t[3]) (b) t[3] = 45 (c) print(max(t)) (d) print(len(t))   | 1            | K2             | CO3       |
| 7. Which keyword is used for function?<br>(a) define (b) fun (c) def (d) function  | 1            | K1             | CO4       |
| 8. Which keyword is used to import a module in Python?<br>(a) use (b) require (c) import (d) include   | 1            | K1             | CO4       |
| 9. What will be the output of the following code snippet?<br>x = 10<br>y = "20"<br>print(str(x) + y)<br>(a) 30 (b) "1020" (c) Error (d) "10200"  | 1            | K2             | CO5       |
| 10. Which keyword is used to handle exceptions in Python?<br>(a) try (b) catch (c) except (d) handle   | 1            | K1             | CO6       |

**PART - B (12 × 2 = 24 Marks)**

Answer ALL Questions

- |   |   |    |     |
|---|---|----|-----|
| 11. List the difference between Interpreter and Compiler. | 2 | K2 | CO1 |
| 12. State about Python variables.                         | 2 | K1 | CO1 |
| 13. Define control statement. What are all the types?     | 2 | K1 | CO2 |
| 14. Write the syntax of for loop in python.               | 2 | K1 | CO2 |

- |  |   |    |     |
|--|---|----|-----|
| 15. Define list with an example.                                       | 2 | K1 | CO3 |
| 16. State Python tuple.  | 2 | K1 | CO3 |
| 17. Compare Local and Global variables in Python functions.            | 2 | K2 | CO4 |
| 18. Define Fruitful functions with an example.                         | 2 | K1 | CO4 |
| 19. Write the program to check whether the given number is odd or not. | 2 | K3 | CO5 |
| 20. Write the syntax to define a function.                             | 2 | K1 | CO5 |
| 21. Define Try Except in Python.                                       | 2 | K2 | CO6 |
| 22. State python Zero Division Error.                                  | 2 | K1 | CO6 |

**PART - C (6 × 11 = 66 Marks)**

Answer ALL Questions

- |  |    |    |     |
|--|----|----|-----|
| 23. a) List the types of operators in python and explain each with an example.                       | 11 | K2 | CO1 |
| <b>OR</b>  |    |    |     |
| b) Write a python program to perform Arithmetic Operations.  | 11 | K2 | CO1 |
| 24. a) Implement a Python program that prints the multiplication table of a number using a for loop. | 11 | K3 | CO2 |
| <b>OR</b>  |    |    |     |
| b) Write a program to find whether the given number is prime or not.                                 | 11 | K3 | CO2 |
| 25. a) List out the operations and methods that are available with Python Dictionaries.              | 11 | K2 | CO3 |
| <b>OR</b>  |    |    |     |
| b) Explain String functions and Methods used in Python.  | 11 | K2 | CO3 |
| 26. a) Write a program for addition of two integers using functions in Python.                       | 11 | K2 | CO4 |
| <b>OR</b>  |    |    |     |
| b) Explain the use of Python functions for finding the GCD of two given numbers.                     | 11 | K2 | CO4 |
| 27. a) Write a Python function that takes a list of numbers as input and returns their average.      | 11 | K3 | CO5 |
| <b>OR</b>  |    |    |     |
| b) Write a Program to find greatest among two numbers using function.                                | 11 | K3 | CO5 |
| 28. a) Sketch the working principle of Exception handling with examples.                             | 11 | K3 | CO6 |
| <b>OR</b>  |    |    |     |
| b) Write a program to explain the concept of multiple except block and else clause.                  | 11 | K3 | CO6 |