

Reg. No.

Question Paper Code

12111

B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2023

Second Semester

Civil Engineering

(Common to Electronics and Communication Engineering, Electrical and Electronics Engineering, Electronics and Instrumentation Engineering, Instrumentation and Control 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. Define Explicit type conversion. | 2,K1,CO1 |
| 2. Discuss about Script mode. | 2,K2,CO1 |
| 3. Write a program to find the greatest number from three numbers. | 2,K2,CO2 |
| 4. Write a Program to determine whether a person is eligible to vote. | 2,K2,CO2 |
| 5. Define Python tuple. | 2,K1,CO3 |
| 6. List out the string functions available in python. | 2,K1,CO3 |
| 7. Define Fruitful functions with an example. | 2,K1,CO4 |
| 8. Compare Local and Global variables in Python functions. | 2,K2,CO4 |
| 9. Write a Python program to implement sum of N numbers. | 2,K2,CO5 |
| 10. Write a Program that subtracts two numbers using a function. | 2,K2,CO5 |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) Explain briefly constant, variables, expression, keywords and statements available in python. 13,K2,CO1
- OR**
- b) List the types of operators in python and explain the different expressions in detail. 13,K2,CO1
12. a) (i) Write a Program to Distance Between Two Points. 7,K2,CO2
(ii) Explain in detail about Iteration with suitable examples. 6,K2,CO2
- OR**
- b) Explain conditional, alternative and chained conditional with an example program for each. 13,K2,CO2

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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13. a) Explain in detail about how to create a tuple, how to access elements of a tuple and delete a tuple. 13,K2,CO3

OR

- b) Explain Linear search and Binary search with an example. 13,K2,CO3
14. a) Explain Predefined Module and User defined Module in detail with suitable program. 13,K2,CO4

OR

- b) (i) Illustrate addition of two integers using functions in Python 7,K2,CO4
(ii) Illustrate area of different shapes using Packages. 6,K2,CO4
15. a) (i) Write a Python program to implement sum of array of N numbers. 7,K3,CO5
(ii) Write a program to print first 10 numbers using a while loop. 6,K3,CO5

OR

- b) (i) Illustrate the working principle of Recursion with a suitable example. 7,K2,CO5
(ii) Illustrate the usage of lambda functions using a Python program to find smaller of two numbers. 6,K2,CO5

PART - C (1 × 15 = 15 Marks)

16. a) (i) Illustrate how objects can be instantiated from a Python Class, Student. 9,K2,CO6
(ii) What is the output of the following program? 6,K2,CO6

```
value = [1, 2, 3, 4, 5]
try:
    value = value[5]/0
except (IndexError, ZeroDivisionError):
    print("GeeksforGeeks ", end = " ")
else:
    print("GFG ", end = " ")
finally:
    print("Geeks ", end = " ")
```

- a) Compilation error
b) Runtime error
c) GeeksforGeeks GFG Geeks
d) GeeksforGeeks Geeks

OR

- b) Explain about Handling Exceptions with examples. 15,K2,CO6