Reg. No.							
			STATE OF	12-			

**Question Paper Code** 

11744

# B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022

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)

## 20ESIT201 - PYTHON PROGRAMMING WITH LABORATORY

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

# $PART - A (10 \times 2 = 20 Marks)$

Answer ALL Questions

		Marks, K-Level, CO
1.	List the two basic modes in python.	2,K1,CO1
2.	Define keyword and list the reserved words.	2,K1,C01
3.	Explain about break statement with an example.	2,K2,CO2
4.	Write a python program to find the distance between two points $(4,6)$ and $(0,6)$ .	2,K2,CO2
5.	Compare Mutable and Immutable data types in python.	2,K2,CO3
6.	List some approaches that can be used for Cloning a list.	2,K1,CO3
7.	Write a python program to divide two numbers using function.	2,K2,CO4
8.	Define fruitful function.	2,K1,CO4
9.	List the use of init() method.	2,K1,CO5
10.	Write the output of the program?	2,K2,CO5
	try:	
	name = 'Bob'	
	name += 5	
	except (NameError, TypeError) as error: print(error)	
	rollbar.report_exc_info()	

### PART - B $(5 \times 13 = 65 \text{ Marks})$

**Answer ALL Questions** 

11.	a)	Explain the different operators in python?	13,K2,CO1
	b)	Write a python program to create a simple calculator.	13,K2,CO1
12.	a)	Write a python program to create a TNEB calculator to identify the bill amount for the given condition?  If unit consumed <= 100 then cost per unit is Rs 3.46	13,K2,CO2

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

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-1

			100
		If unit consumed >= 101 and <= 300 then cost per unit is Rs 7.43	
		If unit consumed >= 301 and <= 500 then cost per unit is Rs 10.32	
		If unit consumed >= 501 then the cost per unit is Rs 11.71	
		Line rent is Rs 1.45 per unit.	
		Additional fixed Meter rent is Rs 100,	
		The tax on the bill is 16 percent which can be taken as 0.16.	
		OR	
racy:	b)	Explain the different iterative statements in python with example.	13,K2,CO2
13.	a)	Explain the different operations and methods in dictionaries.	13,K2,CO3
		OR	
	b)	Write a Python program for Binary search.	13,K2,CO3
14.	a)	Explain the use of modules in python and write a program to calculate	13,K2,CO4
		sin, cos and tan functions using built-in modules.	
		OR	~7
	b)	Write a python program to calculate the Area of different shapes using	13,K2,CO4
		Packages.	
15.	a)	(i) Write a Python program to create Student class and instantiate its	6,K2,CO5
		Object.	
		(ii) Define Constructor. Explain how it is implemented in Python.	7,K2,CO5
		OR	
	b)	Explain Python Exception Handling with an Example.	13,K2,CO5
		$PART - C (1 \times 15 = 15 Marks)$	
16.	a)	(i) Write a python program to find factorial of a number using	8,K2,CO6
		recursive function.	
		(ii) Write a python program using function to find the max of three	7,K2,CO(
		numbers.	
		OR	15 V2 COC
	b)	Write a Python program for implementation of Merge Sort.	15,K2,CO6