

Programme: B. Tech CSE

Course: Introduction to Python Programming

Course Code: 3TECCS301

Enrolment no. \_\_\_\_\_

Full Marks: 70

Time: 3 Hrs.

Q. No.	Questions	CO	Bloom Taxonomy Category	Marks	
<b>Section I</b>					
1	<b>Short Answer type questions</b>				
a	Describe the types of comment supported by python. or How you will define keyword? Name at least ten keywords supported by Python.	CO1	Understand	<b>4 x 5 = 20</b>	
b	Write a Python program using a while loop that repeatedly asks the user to enter a number and display it. If the user enters a negative number, the program should stop asking and print "Loop ended". Use a break statement in your program. or Write a Python program that displays the greatest among three numbers entered by the user. Use an if-elif-else block to display the appropriate message.	CO2	Apply		
c	What is an exception? Name some built-in exceptions. or What does error mean in Python? Explain the concept of errors in programming.	CO3	Understand		
d	How String can be defined? Briefly explain its three functions. or Write a Python function to implement pow (x, n).	CO2	Understand		
<b>Section II</b>					
<b>Long Answer type questions</b>					
2	Write the function to send data from a GUI interface to a database (employee db) which contain a table employee whose attribute are empname, salary and designation. The GUI interface contains the entry widgets namely e1, e2 and e3 for employee name, salary and designation respectively. or Explain the prerequisite for connecting Python with a database .	CO4	Apply		<b>3 x 10 = 30</b>
3	Design a GUI program in python which will display the average of three subject marks of any student. or How can you create your own exception in Python?	CO3	Apply		
4	Describe lambda function. How does it is different from regular function? Explain with a proper example. or Discuss about the different data types supported by Python.	CO1	Understand		
<b>Section III</b>					
<b>Application based questions</b>					
5	Write a Python program using Tkinter to create a simple GUI application with the following features: (a)A window with the title "Arithmetic Operation". (b)Two entry fields for the user to input numbers. (c)A button that performs addition of the two input numbers. (d)A label that displays the result of the addition when the button is clicked. Explain how the GUI components (buttons, entry fields, and labels) interact in your program. How does Tkinter handle events (like button clicks) to update the label with the result? or Write a Python program that takes two numbers as input from the user. Divides the first number by the second and handles the potential exception when dividing by zero. Display the result of the division if successful or an appropriate error message if an exception occurs. Uses finally block to display a message.	CO3	Create	<b>1 x 20 = 20</b>	

**COURSE OUTCOME**

At the end the course the candidate will able to

CO1: Define and demonstrate the use of built-in data structures "lists" and "dictionary".

CO2: Design and implement a program to solve a real world problem.

CO3: Design and implement GUI application and how to handle exceptions and files.

CO4: Make database connectivity in python programming language.