



R20 Regulation

**TKR COLLEGE OF ENGINEERING AND TECHNOLOGY**  
(Autonomous, Accredited by NAAC with 'A' Grade)

Subject code: 3P4HD

**B.Tech IV Semester Regular Examinations, July 2022**

**PYTHON PROGRAMMING**  
(CSE (DATA SCIENCE))

**Maximum Marks: 70**

Date:02.08.2022 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 What are reserved word?
- 2 Write a Python program To find whether a given number is Armstrong number or not.
- 3 Differentiate between append() and extend() methods?
- 4 Write a Python program to swap the values of two variables using tuple assignment
- 5 Differentiate Errors and Exceptions.
- 6 Write about class constructor(`__init__()`),self-variable
- 7 Point out different modes of file opening
- 8 Differentiate packages and modules.
- 9 What is Object Relational Managers (ORMs)?
- 10 What are the steps to create widgets.

Part-B

Answer All the following questions.

(10MX 5=50Marks)

- 11 A.Explain in details about conditional statements with example program. 5  
B.Explain usage of continue, break, and pass keyword in python. 5  
OR
- 12 Explain various operators used in python with example. 10
- 13 A.Explain Lists along with methods associated with lists and explain mutability with respect to Lists. 5  
B.Write a Python program to add two matrices 5  
OR
- 14 A. Write a Python program to find reverse of given number using user-defined function. 5  
B. Write a Python program using recursive function to find factorial of a number. 5

- 15 A. Write a class with following criteria  
 Class name: Flower  
 Objects: lilly, rose, hibiscus  
 Properties: price,color,smell  
 Methods: get(), display()  
 B. Narrate about Inheritance. 5
- OR
- 16 A. Write a Python program which will throw exception if the value of denominator entered by user is zero. 5  
 B. Implement a real-time Python application using Exception handling for voter's age validity. 5
- 17 A. Implement a real-time Python application using File handling to copy data from one file to another 5  
 B. Write a python program to count the number of words in a text file. 5
- OR
- 18 A. What is module? How many ways to import module in python? 5  
 B. Write a python code to check the given number is prime or not using modules. 5
- 19 Explain the creation of different types of containers available in Tkinter? Write a Python GUI program to create three push buttons using Tkinter. The background color of frame should be different when different buttons are clicked. 10
- OR
- 20 Develop following GUI components: 10  
 a) To create Entry b) Radio button c) checkbox d) menu e) Button f) List box