



R20 Regulation

Subject code:305DA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech V Semester Supplementary Examinations, May 2025

PYTHON PROGRAMMING

(ECE)

Maximum Marks: 70

Date: 19.06.2025

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.
 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) | | Marks | CO | BTL |
|--|---|-------|----|-----|
| 1 | State any four applications where python is more popular. | 2M | 1 | L1 |
| 2 | What are membership operators? Give an example? | 2M | 1 | L1 |
| 3 | Write the different syntaxes for Range function. | 2M | 2 | L1 |
| 4 | Define pass, continue statements. | 2M | 2 | L1 |
| 5 | How to create list in python? | 2M | 3 | L1 |
| 6 | Define a Recursive function. | 2M | 3 | L1 |
| 7 | What is lambda function in python? | 2M | 4 | L1 |
| 8 | Write the role of a return statement in a function. | 2M | 4 | L1 |
| 9 | What are the uses of File object? | 2M | 5 | L1 |
| 10 | Name a Pandas function used to read a file. | 2M | 5 | L1 |

Part-B

| Answer All the following questions. (5X10M=50Marks) | | Marks | CO | BTL |
|---|--|----------|----|-----|
| 11 | Explain different Data types in python with an example. | 10M | 1 | L2 |
| OR | | | | |
| 12 | List different operators in python, in the order of their precedence. | 10M | 1 | L2 |
| 13 | Define while loop. Write a Python program using while loop to print first N numbers divisible by 5. | 10M | 2 | L2 |
| OR | | | | |
| 14 | Explain about loop, pass and continue statements with example. | 10M | 2 | L2 |
| 15 | a. Describe how indexing works in Python lists with an example. b. Devise a program that merges two dictionaries in Python. | 5M 5M | 3 | L2 |
| OR | | | | |
| 16 | Discuss about list and dictionary comprehensions in Python. | 10M | 3 | L2 |
| 17 | Explain the following file built-in functions and method with clear syntax, description and illustration: a) open() b) file() c) seek() d) tell() e)read() | 10M | 4 | L2 |
| OR | | | | |

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|----|--|-----|---|----|
| 18 | Develop a Python script that prompts the user to input a sentence and then reverses the order of words in that sentence. | 10M | 4 | L2 |
| 19 | Examine the efficiency of various methods to merge or concatenate Pandas Data Frames. | 10M | 5 | L2 |
| OR | | | | |
| 20 | Develop a program that uses NumPy to perform element-wise operations on two arrays. | 10M | 5 | L2 |