



R20 Regulation

Subject code:306AE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, December 2024

PYTHON PROGRAMMING (Civil Engineering)

Maximum Marks: 70

Date:09.01.2025

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 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)		CO	Bloom Tx
1	List keywords in Python.	1	L1
2	List some of the keywords in python?	1	L1
3	PEMDAS stand for in Python expressions?	2	L1
4	What's the result of the logical AND operation when both operands are True?	2	L1
5	What are default arguments in Python functions?	3	L1
6	How are keyword arguments specified in a function call?	3	L1
7	What is a package in Python?	4	L1
8	What is the primary use of NumPy in Python?	4	L1
9	What does inheritance facilitate in object-oriented programming?	5	L1
10	What purpose does the self-keyword serve in Python class methods?	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	Demonstrate the significance of proper indentation in Python with a code snippet. Explain its role in code readability. (10M)	1	L2
OR			
12	A) Write the history of Python. (5M) B) How do you run a python script in various modes. Explain with a python program. (5M)	1	L2
13	Elaborate on the functionality of bitwise operators (&, , ^, ~, <>) and provide scenarios where they are commonly applied. (10M)	2	L2
OR			
14	Explain the logical operators 'and', 'or', and 'not' with truth tables and illustrate their usage in Python expressions. (10M)	2	L2
15	A) Describe the purpose and usage of variable-length arguments (*args) in Python functions. (5M) B) Explain the concept of fruitful functions in Python and the importance of returning values from functions. (5M)	3	L2
OR			

16	A)Elaborate on the use of default arguments in Python functions and their impact on function calls. (5M) B)Differentiate between global and local variables in Python functions. Provide examples illustrating their scopes. (5M)	3	L2
17	A)Discuss the purpose and advantages of creating modules in Python programming. (5M) B)Explain the role of the import statement in Python and how it facilitates namespace management. (5M)	4	L2
	OR		
18	A)Define a package in Python and elaborate on its benefits in organizing and managing code. (5M) B)Describe the primary functionalities of the NumPy package in Python and its importance in numerical computing . (5M)	4	L2
19	List and explain the different phases involved in object-oriented programming language. (10M)	5	L2
	OR		
20	Explain the concept of Exception Handling in Python with suitable program. (10M)	5	L2