



R18 Regulation

Subject code: 2P4EC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech IV Semester Supplementary Examinations, February 2024

PYTHON PROGRAMMING

(CSE)

Maximum Marks: 70

Date: 23.02.2024 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)		CO	Bloom Tx
1	List python standard/built-in data types	CO1	L1
2	What is interactive mode in python	CO1	L1
3	Write a python program to print the following pattern 1 2 3 4 5 6 7 8 9 10	CO2	L2
4	What is floor division or truncating division? Give example.	CO2	L1
5	Distinguish between parameter and argument	CO3	L2
6	List the properties of dictionary in python.	CO3	L2
7	Define package. How to import a package in python program.	CO4	L1
8	Solve the following linear equations using scipy library module $X+3y+5z=10$ $2x+5y+z=8$ $2x+3y+8z=3$	CO4	L2
9	Write about data hiding in python with example program	CO5	L1
10	Write a python class which has two methods get_String and print_String. get_String accepts a string from the user and print_String print the string in uppercase.	CO5	L1

Part-B

Answer All the following questions. (10M X 5=50Marks)			
11	a) Explain how Python is different from C/C++/Java. [5] b) Write about input/output statements in python with suitable examples. [5]	CO1	L2, L2
	OR		
12	a) Write a python program to convert given decimal number into binary, octal and hexadecimal. [5]	CO1	L3,

	b) What is an Identifier? Mention the rules to define an identifier. [5]		L1
13	a) Explain about control transfer statements in python with suitable examples. [5] b) Write a Python program to check the validity of password input by users. [5] Validation: - At least 1 letter between [a-z] and 1 letter between [A-Z]. - At least 1 number between [0-9]. - At least 1 character from [!#\$%&']. - Minimum length 6 characters. - Maximum length 16 characters.	CO2	L2 L3
	OR		
14	a) Write about membership & identity operators in python with suitable examples. [5] b) Write a Python program which iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz". [5]	CO2	L2 L3
15	a) List the string methods with examples. [5] b) Discuss about scope of the variables in python functions.[5]	CO3	L1 L2
	OR		
16	a) Write a python function to create and print a list where the values are square of numbers between 1 and 30 (both included). [5] b) Explain about anonymous functions and fruitful functions in python with example programs. [5]	CO3	L3 L2
17	a) Write a python program to append data to an existing file and then displaying the entire file. [5] b) Explain importance of 'matplotlib' and its usage. [5]	CO4	L3 L2
	OR		
18	a) Write a python program to find the determinant for a 2*2 matrix using scipy library module . [5] b) Discuss the different modes for opening a file and closing a file. [5]	CO4	L3 L1
19	a) How to declare a constructor method in Python? Explain with an example. [5] b) Explain the features of Inheritance in python with appropriate examples. [5]	CO5	L2 L2
	OR		
20	a) How to handle exception in python explain in detail with suitable examples. [5] b) Write a python program using classes and objects to simulate result preparation system for 20 students. The data available for each student includes: Name, Rollno. and Marks in 3 subjects and also calculate percentage and grades for each student. [5]	CO5	L2 L3