



R22 Regulation

Subject code: 4E3EB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Semester Regular Examinations, February 2024

PYTHON PROGRAMMING

(Common to CSE, CSE(AI&ML) & CSE(DS))

Maximum Marks: 60

Date: 21.02.2024 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			CO	Bloom Tx level
All the following questions carry equal marks (10x1M=10 Marks)				
1 a	Define the scope and lifetime of a variable in python		1	L1
b	What happens if a semicolon (;) is placed at the end of a python statement?		1	L1
c	Differentiate between logical and bitwise operators		2	L2
d	What does pass do in python loop?		2	L3
e	What is a set?		3	L1
f	What is a reusable function?		3	L1
g	What is a text file?		4	L1
h	Define module in python?		4	L1
i	Differentiate error and exception		5	L2
j	What is class and object in Python		5	L1
Part-B				
Answer All the following questions. (5X10M=50Marks)				Bloom Tx level
2	a	Is python a "scripting language"? Describe the need of python programming. [5M]	1	L2
	b	Illustrate the use of input and output statements with the necessary syntax and write example program. [5M]	1	L2
OR				
3	a	What is variable? How to print variables in python and explain multiple assignments in python with examples. [5M]	1	L2
	b	Explain about the following data types with examples : int, float, boolean, complex and str. [5M]	1	L2
4	a	What are operators in python? Describe specifically about identity and membership operator. [5M]	2	L2
	b	What is the purpose of else clause for a loop? Explain how else works with while and for loops with examples. [5M]	2	L2
OR				

5	a	Evaluate the following expressions. [5M] i)200-100/5*4 ii)4-1+2*4/2*2 iii) 3**3**5	2	L5
	b	Explain with an example break and continue statements using while loop. [5M]	2	L2
6	a	Explain types of arguments are used in python? Justify your answer with sample program. [5M]	3	L2
	b	Write a recursive python function that recursively computes sum of elements in a list of lists. Sample Input: [1, 2, [3,4], [5,6]] Expected Result: 21 [5M]	3	L3
OR				
7	a	Write a python program to get the top three items in a shop using dictionary. Sample data: {'item 1':45.50, 'item 2': 35,'item 3':41.30, 'item 4':55, 'item5':24} Expected output: item4 55 item1 45.5 item3 41.3 [5M]	3	L3
	b	What is tuple? Explain the basic tuple operations with an example. [5M]	3	L2
8	a	Write a python program to find the longest words in a read file. [5M]	4	L3
	b	What are the two ways of importing module? Which one is more beneficial? Explain. [5M]	4	L2
OR				
9		Define file and explain the purpose of file in Python Programming and explain about file functions with examples [10M]	4	L2
10	a	Discuss the relationship between a class and object. Write a program which shows how to define a class, how to access a member function and how to create and access objects in python. [5M]	5	L3
	b	How can you catch multiple exceptions using a single except block? Explain with an example. [5M]	5	L3
OR				
11		What are different types of inheritance supported by python? Explain. [10M]	5	L2