



R22 Regulation

Subject code: 4E3EB

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

**B.Tech III Semester Supplementary Examinations, July 2024**

## PYTHON PROGRAMMING

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

**Maximum Marks: 60**

Date: 23.07.2024 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	How variable is created?	1	L3
2	State any two applications where python is more popular	1	L1
3	What is the use of pass in for loop in Python?	2	L1
4	What is precedence and order of evaluation?	2	L1
5	How to access values in a dictionary?	3	L3
6	Define tuple.	3	L1
7	Define module.	4	L3
8	How to open a new file in python?	4	L3
9	What are the different types of errors in python?	5	L1
10	How to create class in python?	5	L1
Part-B			Bloom Tx level
Answer All the following questions. (5X10M=50Marks)			
11	Demonstrate briefly about the features of python programming language and also write various data types with their sizes. [10]	1	L2
OR			
12	a Define variable in python and list the rules of python variables. [5]	1	L1
	b Explain the history of python evolution. [5]	1	L2
13	a Explain the conditional branching statements supported by python with an appropriate example. [5]	2	L2
	b Explain about different logical, bitwise, assignment operators in python with appropriate examples. [5]	2	L2
OR			
14	Read the marks of a student in four subjects. Then calculate the total and aggregate, and display the grade obtained by the student. [10] (i) If the student scores an aggregate greater than 75%, then the grade is distinction.	2	L3

		(ii) If aggregate is $60 \geq$ and $< 75$ , then the grade is first division. (iii) If aggregate is $50 \geq$ and $< 60$ , then the grade is second division. (iv) If aggregate is $40 \geq$ and $< 50$ , then the grade is third division. (v) Else the grade is fail		
15	a	How to declare and call functions in python programs? Illustrate with an example script. [5]	3	L3
	b	Write a python program to read a word and print the number of letters, vowels and percentage of vowels in the word using a dictionary. [5]	3	L3
OR				
16	a	What are sets in python? Explain set operations with an example. [5]	3	L2
	b	What is list in python? How to create nested lists? [5]	3	L6
17	Write a numpy program to compute the outer products of two give vectors. [10]		4	L3
OR				
18	a	Write a python program to copy the contents of a one file to another file. [5]	4	L3
	b	What is module in Python? Explain how can you use modules in your program explain with an example code. [5]	4	L2
19	a	What are the different types of inheritance supported by python? Demonstrate with example programs. [5]	5	L2
	b	Differentiate error and exception. Explain in detail about exception handling with suitable examples? [5]	5	L2
OR				
20	a	Explain about classes and objects and write the syntax to create class and object? [5]	5	L2
	b	What do you mean by a constructor? List and describe various constructors. [5]	5	L4