



B.Tech IV Semester Supplementary Examinations, July 2024

PYTHON PROGRAMMING
(CSE(DS))

Maximum Marks: 70

Date:31.07.2024 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 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	What happens if a semicolon (;) is placed at the end of a Python statement?	1	L1
2	Describe type() method with example.	1	L1
3	Define if...else statements in python.	2	L1
4	What is floor division or truncating division? Give example.	2	L1
5	List the properties of dictionary in python.	3	L1
6	Distinguish between parameter and argument	3	L1
7	List the file opening Modes.	4	L2
8	Mention the usage of modules in Python Programming.	4	L1
9	How to create a class in python?	5	L2
10	How to handle multiple exceptions with single except clause.	5	L3

Part-B

Answer All the following questions. (5X10M=50Marks)			
11	a) Explain how Python is different from C/C++/Java. (5M) b) Write about input/output statements in python with suitable examples. (5M)	1	L2
OR			
12	Explain about the need for learning python programming and its importance. [10M]	1	L2
13	a) Write a Python program to evaluate exponential series. (5M) (Hint: $e^x = 1+x/1!+x^2/2!+x^3/3!+.....$) b) Write a python program to display characters of a given string in reverse order using for loop? (5M)	2	L3
OR			
14	a)Describe Python control statements with appropriate examples. (5M)	2	L3

	<p>b) Write a python program to print the following pattern using looping statements.</p> <pre> 1 121 12321 1234321 123454321 </pre> <p>(5M)</p>		
15	<p>a) Discuss about Default and variable length arguments each with two example programs. (5M)</p> <p>b) Write a Python Program to find out common elements in given lists. (5M)</p>	3	L2
	OR		
16	<p>a) Write a python function to create and print a list where the values are square of numbers between 1 and 30 (both included). (5M)</p> <p>b) Explain about anonymous functions and fruitful functions in python with example programs. (5M)</p>	3	L3
17	<p>a) Write a python program to append data to an existing file and then displaying the entire file. (5M)</p> <p>b) Explain importance of 'matplotlib' and its usage. (5M)</p>	4	L3
	OR		
18	<p>Write a python program to find the mean and variance for the following data using scipy. [2,23,45,56,78,89,13,33,66,89] (10M)</p>	4	L2
19	<p>a) List and explain the different phases involved in object-oriented programming language. (5M)</p> <p>b) Write a Python program to demonstrate Multiple Inheritance (5M)</p>	5	L2
	OR		
20	<p>a) How to handle exception in python explain in detail with suitable examples? (5M)</p> <p>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. (5M)</p>	5	L3