BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

USN										Course Code	2	2	P	L	C	2	5	B

Second Semester B.E. Degree Examinations, Sept/Oct 2023
INTRODUCTION TO PYTHON PROGRAMMING

Duration: 3 hrs   **Max. Marks: 100**

Note: *1. Answer any **FIVE** full questions, choosing **ONE** full question from each module.*
          2. Missing data, if any, may be suitably assumed

Q. No		*Question*	*Marks*	*(RBTL:CO: PI)*
		MODULE – 1		
1.	**a.**	Explain any arithmetic and logical operators with example.	**8**	2:1:1.3.1
	b.	Explain any five inbuilt function i,e.. print(),input(),int(),float(),str().	**6**	2:1:1.3.1
	c.	Develop a program to read the name and year of birth of a person. Display whether the person is a eligible to vote or not	**6**	2:1:1.3.1
		OR		
2.	**a.**	Explain 'if','if else' and 'elif' statements in python with example.	**8**	2:1:1.3.1
	b.	Explain about the function definition statements used in python.	**6**	2:1:1.3.1
	c.	Write a function to calculate factorial of a number.	**6**	2:1:1.3.1
		MODULE – 2		
3.	**a.**	Define list and explain the methods to access the individual values from the list.	**8**	2:2:1.3.1
	b.	Demonstrate lists like data-types with an example.	**6**	2:2:1.3.1
	c.	[12,35,9,56,24], write a program to get interchange of first and last element in the list	**6**	2:2:1.3.1
		OR		2:2:1.3.1
4.	**a.**	Compare the *list* and *dictionary* data type in function with example.	**8**	2:2:1.3.1
	b.	With an example brief about pretty print in dictionary.	**8**	2:2:1.3.1
	c.	Illustrate get () and setdefault () method in dictionary data type.	**4**	2:2:1.3.1
		MODULE – 3		
5.	**a.**	Explain different types of String Literals.	**6**	2:3:1.3.1
	b.	Illustrate with example any two useful string methods.	**6**	2:3:1.3.1
	c.	.The height and weight of the 5 persons in a team is as follows, Height=[1.82,1.52,1.67,1.88,1.37,1.58] in meters Weight=[52,60,78,66,56,48] in weight, using the same data, Develop a python program to find the mean body mass index of the same.	**8**	2:3:1.3.1
		OR		2:3:1.3.1

Note: (**RBTL - Revised Bloom's Taxonomy Level: CO - Course Outcome: PI - Performance Indicator**)

6.	a.	Write a short note on Reading and Writing Files	10	2:3:1.3.1
	b.	Write a python code to display the following,	10	2:3:1.3.1

b. Write a python code to display the following,
#####Picnic Items#####
Cookies-----------10
Biscuit------------05
Cakes-------------10
Total----25

MODULE – 4

7.	a.	Explain the following file operation with an example, a)Copying files and Folders b)Moving files and folders	8	2:4:5.1.1
	b.	List the benefits of compressing the files also explain the reading zip files with an example	6	2:4: 5.1.1
	c.	With an example demonstrate shutil.copy() and shutil.copytree() method	6	2:4: 5.1.1

OR

2:4: 5.1.1

8.	a.	Explain in detail raising exception.	8	2:4: 5.1.1
	b.	Discuss briefly about Assertion and Logging.	6	2:4: 5.1.1
	c.	Write a function named DivExp which takes TWO parameters a, b and returns a value c (c=a/b). Write suitable assertion for a>0 in function DivExp and raise an exception for when b=0. Develop a suitable program which reads two values from the console and calls a function DivExp.	6	2:4: 5.1.1

MODULE – 5

9.	a.	Explain in detail about the 1)Inheritance with an example. 2)Concept of Copying using copy module With and example.	10	2:5: 5.1.1
	b.	Develop a program that uses class Student which prompts the user to enter marks in three subjects and calculates total marks, percentage and displays the score card details. OHint: Use list to store the marks in three Subjects and total marks. Use init () method to initialize name, USN and the lists to store marks and total, Use getMarks() method to read marks into the list, and display() method to display the score card details.	10	2:5: 5.1.1

OR

2:5: 5.1.1

10.	a.	Explain in detail about the printing of an objects with an example.	5	2:5: 5.1.1
	b.	Discuss Time, Pure functions.	5	2:5: 5.1.1
	c.	Define a function which takes TWO objects representing complex numbers and returns new complex number with a addition of two complex numbers. Define a suitable class 'Complex' to represent the complex number. Develop a program to read N (N >=2) complex numbers and to compute the addition of N complex numbers.	10	2:5: 5.1.1

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