

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

Theory Exam-III, December 2022

BCA, Semester I

Roll No.....

COURSE CODE: CS1115

Time: 2 Hours

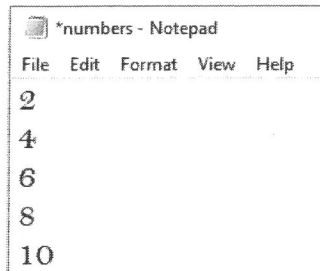
Max. Marks: 30

COURSE TITLE: Problem Solving with Python

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

Q.1	What will be the output of the following programs? Give explanation. (a) <code>myString = "pynative"</code> <code>stringList = ["abc", "pynative", "xyz"]</code> <code>print(stringList[1] == myString)</code> <code>print(stringList[1] is myString)</code> (b) <code>Mixed_List = ['pet', 'dog', 5, 'cat', 'good', 'dog']</code> <code>print(Mixed_List.count('dog'))</code> (c) <code>MyList = ['Red', 3]</code> <code>MyList.extend('Green')</code> <code>print(MyList)</code> (d) <code>5 + 4 * 9 % (3 + 1) / 6 - 1</code> (e) Write the correct way to access the value of a history subject: <pre>sampleDict = { "class":{ "student":{ "name":"Mike", "marks":{ "physics":70, "history":80 } } } }</pre>	05	LO1, 2,3
Q.2	Write a python program to add the sum of numbers from 1 to 25, 50 to 75 and 90 to 100 using three different for loops. Note: What are your observations from the code. Is any possibility to write the common code once and use it repeatedly? (If yes, write the program in python.)	05	LO2,3

Q.3	Write a python program to prompt for a Score between 0.0 and 1.0. If the Score is out of range, print an error. If the score is between 0.0 and 1.0, print a grade using the following table:	05	LO2												
	<table><thead><tr><th>Score</th><th>Grade</th></tr></thead><tbody><tr><td>≥ 0.9</td><td>A</td></tr><tr><td>≥ 0.8</td><td>B</td></tr><tr><td>≥ 0.7</td><td>C</td></tr><tr><td>≥ 0.6</td><td>D</td></tr><tr><td>< 0.6</td><td>F</td></tr></tbody></table>	Score	Grade	≥ 0.9	A	≥ 0.8	B	≥ 0.7	C	≥ 0.6	D	< 0.6	F		
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≥ 0.7	C														
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Q.4	Write a python program to add the content of a file numbers.txt and display the sum of all the numbers present in the file.	05	LO4												
															
Q.5	Write code snippets in Python to perform the accessing elements of a tuple, modifying elements of a tuple, and deleting elements of a tuple.	05	LO3												
Q.6	Illustrate the different types of control flow statements available in Python with examples.	2.5	LO2												
Q.7	Write a python program to catch on Divide by zero exception. Add a finally block too.	2.5	LO5												