UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2021

Course: Python Programming	Semester: III
Program: BCA – BFSI	Duration: 03 hrs.
Course Code: CSBC 2019	Max. Marks: 100

Instructions:
1. Write short / brief answers for Section A
2. Write medium length answers for Section B
3. Write Long answers for Section C

SECTION A
(Scan and Upload)
(5Q x 4M = 20 Marks)

S. No.	Question	Marks	COs
Q 1	What is the difference between compiled and interpreted languages?	4	CO1
Q 2	Compare and contrast Tuples from Lists and Dictionaries.	4	CO2
Q 3	"Strings in Python are immutable". Explain this statement with example	4	CO2
Q 4	Define a Class Travel Plan in Python with the following descriptions: Private members: Plan Code of type Long Place of type character array (string) Numbers_of_travellers of type integer Numbers_of_buses of type integer	4	CO3
Q 5	What happens if except clause is written without any Exception type? Explain with an example.	4	CO4

SECTION B
(Scan and Upload)
(4Qx10M = 40 Marks)

S. No.	Question	Marks	CO
Q 1	Explain three types of errors encountered in python programs with example.	10	CO1
Q 2	Write a Python program that counts the number of occurrences of a letter in a string, using dictionaries.	10	CO2
Q 3	Write a Python program to read a file and count and print the lines that start with the word "From". Prompt the user for the file name Also use try/except to handle bad file names.	10	CO4
Q 4	Describe any two list operations and list methods. Write a python program to accept 'n' numbers from user in a list. Find sum of all even numbers and product of all odd numbers in entered list. OR	10	CO2

	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		

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Section C
(Scan and Upload)

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(2Qx 20M= 40 Marks)

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S. No.	Question	Marks	CO
Q 1	Write a python program to check the validity of the password entered by the user. The following criteria should be used to check the validity of the password: Password should have at least: (i) One upper case and one lower case letter (ii) one digit (iii) six characters (iv) One special character from [$ @ # !] (v) Minimum length of password: 6 (vi) Maximum length of password: 12 OR Write a python program to check the conditions of room allotment in a hotel. Rooms at the ground floor are in Luxury category and are costlier than the rooms ate first and second floors. The hotel has no lift facility. Write logic to allocate rooms to able/differently-abled visitors as per their budget preference. Print the message "Room not available" if there is no room as per visitors requirements.	**20**	**CO2**
Q 2	Write a python program that has a class PERSON, Inherits a class STUDENT from PERSON and a class MARKS ATTENDANCE. The attributes of PERSON class are SID, Name, DoB, Gender. Attributes of student class are Class, Branch, Year, MA. Attributes of MARKS ATTENDANCE are Marks and Attendance. Create a student S=Student("500012345", "XYZ", "18-01-98", "M", 85, 98) and display the details of the student.	**20**	**CO3**