

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, Dec 2020

Course: Programming with Python Program: B.Tech CSE-CSF Course Code: CSAI 1001	Semester: V Time 03 hrs. Max. Marks: 100
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SECTION A

- 1. Each Question will carry 5 Marks.**
2. Instruction: Complete the Statement / Select the correct answer(s)

S. No.		CO
Q 1	_____ converts first character of a string to uppercase letter and all other characters lowercased.	CO1
Q 2	Select the special characters that matches a pattern only at the end of the string 1. \B 2. \X 3. \T 4. \A	CO2
Q 3	The methods to remove elements from a set are _____, _____ and _____.	CO1
Q 4	_____ module is used for serializing and de-serializing python object structures	CO3
Q 5	_____ is used to check data dimensionality using pandas library.	CO4
Q6	The system function call _____ creates a copy of the process, which has called it.	CO4

SECTION B

- 1. Each Question will carry 10 Marks.**
2. Write short / brief notes. Make diagrams wherever needed.

Q 7	Write a Python program to count the number of occurrences of a word in a text file.	CO3
Q 8	Discuss various types of arguments used in Functions. Write an example for function calls with an arbitrary number of arguments.	CO1
Q 9	Discuss the concept of Inheritance in Python and write a program to show the use of super() function.	CO2
Q 10	Demonstrate the use of exception handling in Python and discuss any 3 common exception types.	CO3
Q11	Write the python code for the following	CO4

	<ol style="list-style-type: none"> 1. Convert the numbers=[3,5,6,1] to numpy array. 2. Convert all elements to string type.. 3. Print 10 random numbers between 1 to 100 using Numpy. 4. Create an array of complex numbers using Numpy. 													
<p>SECTION-C</p> <p>1. Each Question carries 20 Marks.</p> <p>2. Instruction: Write long Answers.</p>														
<p>Q 12</p>	<p>Write a program to accept following details from a student using GUI</p> <ol style="list-style-type: none"> 1. Name of the student (using Textbox) 2. Gender (Using radio button) 3. Qualification (Using List) 4. Marks of three subjects (using Textbox) <p>Compute the percentage of the student and display it in a textbox.</p> <p style="text-align: center;">Or</p> <p>Discuss the usefulness of pandas library and write a program to create a dataframe to store the following data to a .csv file</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 20%;">Country</th> <th style="text-align: left; width: 80%;">Matches Won</th> </tr> </thead> <tbody> <tr><td>A</td><td>10</td></tr> <tr><td>B</td><td>20</td></tr> <tr><td>C</td><td>16</td></tr> <tr><td>D</td><td>8</td></tr> <tr><td>E</td><td>14</td></tr> </tbody> </table> <p>Then read the data from a file and generate a graph of the data.</p>	Country	Matches Won	A	10	B	20	C	16	D	8	E	14	<p style="text-align: center; font-weight: bold;">CO4</p> <p style="text-align: center; font-weight: bold;">CO4</p>
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