

Name:
Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2021

Course: Python Programming in Petroleum Data Exploration

Program: M.Tech-PE

Course Code: CSAI7015

Semester: 1st

Max. Marks: 100

Duration: 03 hrs.

SECTION A

(5Qx 4M = 20 Marks)

Note: This section have 5 Questions (short answer type) of 4 marks each. All the questions shall be compulsory.

S. No.		Marks	CO
Q 1	Write in brief about Dictionary in python. Write operations with suitable examples.	4	CO1
Q2	What are the advantages of Tuple over List?	4	CO4
Q3	Explain the building blocks of python and state the need for functions in python.	4	CO3
Q4	How to split strings and what function is used to perform that operation?	4	CO4
Q5	List the standard data types in python	4	CO1

SECTION B

(4Qx 10M = 40 Marks)

Note: This section have 4 Questions of 10 marks each. Q6 - Q8 are compulsory and Q9 has internal choice to attempt any one.

Q 6	What type of conditional structures are present in a programming language? How many of them are supported in Python? Explain each with example.	10	CO1
Q 7	Write in brief about Set in python. Write operations with suitable examples.	10	CO3
Q8	What is module and package in Python? Explain how can you access a module written in Python?	10	CO3
Q9	What are the different operations that can be performed on a list? Explain with examples.	10	CO2

SECTION-C

(2Qx 20M= 40 Marks)

Note: Q11 has internal choice to attempt any one.

Q10	a) Describe the different access modes of the files with an example. How to open a new file in Python? Explain how the write method works on a file. b) Write a program in python to compute the number of characters, words and lines in a file.	20	CO4
Q11	What is the difference between lists, tuples and dictionaries? Give an example for their usage. Explain the following list methods with an example. i) append()	20	CO4

- ii) extend()
- iii) insert()
- iv) index()
- v) sort()

OR

Describe the need for catching exceptions using try and except statements. How to handle an exception using try except block? Explain with the help of a program