VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY (VSSUT), ODISHA
Odd Mid Semester Examination for Academic Session 2025-26

COURSE NAME: **B.Tech.**   SEMESTER: **3rd Semester**

BRANCH NAME: **CHEMICAL ENGINEERING**

SUBJECT NAME: **PYTHON**

TIME: **90 Minutes**

FULL MARKS: **30**

Answer **All** Questions.

The figures in the right hand margin indicate Marks. *Symbols carry usual meaning.*

Q1. Answer all Questions.   [2 × 3]

   a) Write down the working principle steps of break and continuous control flow within   - CO1
   a program code?

   b) What do you mean by array in python?   - CO2

   c) Define sets in python with example?   - CO3

Q2.   [5+3]

Elaborate in briefly python list with it's importance in utility, features, characteristic   - CO1
as well as some function or methods? Mention the different way f-string can be
represented with the help of example?

<div align="center">OR</div>   [5+3]

Describe Python sets with its importance in utility, features, characteristic as well as   - CO1
some function or methods? If set 1 = {10, 56, 89, 90, 'Jenny', True} then if you want
to know length of set1, add and remove some item what should be comment you
pass with corresponding output ?

Q3.   [5+3]

Explain dictionary in python in details with its essentiality and implementation   - CO2
including proper example? Write a short note on randomization?

<div align="center">OR</div>   [4+4]

Mention the basic difference between tuple and list, important characteristic of   - CO2
tuple? If tuple 1 = (12, 6, -8, 'Jenny', True, 12, 6), tuple 2 = (45, 67, 90), then what
would be the output of max (tuple 2), min (tuple 1), tuple. Count (12), tuple 1. index
(12)?

Q4.   [5+3]

Describe types of operators to perform operations on values and variables in python   - CO3
briefly with one example? Elaborate concept of indentation and comments in python
language?

<div align="center">OR</div>   [4+4]

Illustrate briefly important of python language, features of python, applications of   - CO3
Python? Explain variables in python language with rules, general naming convention
and declaration elaborately?