VPMP POLYTECHNIC, GANDHINAGAR
DEPARTMENT OF COMPUTER ENGINEERING
DE – SEMESTER 3 MID EXAMINATION- PHASE 2

Subject Code: 4330701   **Date: 17/01/2023**

Subject Name: Scripting Language – Python

Time: 9:30 TO 12:00 PM   **Total Marks: 70**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Explain keyword, identifier and variable.	**03**
	(b)	Explain Input and Output statements in Python by giving examples.	**04**
	(c)	Explain break, continue and pass statement with flowchart, syntax and example.	**07**

OR

	(c)	List out operators. Explain membership operators and assignment operators.	**07**
Q.2	**(a)**	Explain for loop with flowchart, syntax and example.	**03**
	(b)	Explain switch case statement with flowchart, syntax and example.	**04**
	(c)	Write Characteristics of Set and Explain mathematical operations on Set.(Union,Intersection,difference and symmetric difference)	**07**

OR

Q.2	**(a)**	How to create a list. Explain append(),extend(),insert() and delete operations on list.	**03**
	(b)	Write Characteristics of Tuple. Explain indexing and slicing in tuple.	**04**
	(c)	List selection statements and Explain any two python selection statements with flowchart, syntax and example.	**07**
Q.3	**(a)**	List out methods of random module. Explain any three with example.	**03**
	(b)	Create a user defined module with simple functions for: addition, subtraction, multiplication, division. Write a program to import the module and access functions defined in the module.	**04**
	(c)	Write Characteristics of Dictionary. Explain any four operations on dictionary.	**07**

OR

Q.3	**(a)**	List out Formatting function and explain any two.	**03**
	(b)	What are modules in Python? Explain any two math modules.	**04**
	(c)	Explain main classes of Date and Time module with one Example.	**07**
Q.4	**(a)**	Explain add(),update(),remove() and discard() methods of set.	**03**
	(b)	Explain datatypes with example.	**04**
	(c)	Explain following function with example: isalnum( ), isalpha ( ), isdigit( ), isidentifier (), islower(), isupper( ), and isspace( )	**07**

OR

Q.4	**(a)**	List and explain features of Python.	**03**
	(b)	Create a user defined function which prints square of all the even numbers between 1 to 5.	**04**
	(c)	List out types of plots in Matplotlib. Explain any one with example. And Write down steps for PIP Installation.	**07**
Q.5	**(a)**	Python program to calculate the number of digits and letters in a string.	**03**
	(b)	Explain read(),readline() and readlines () for file with example.	**04**
	(c)	What is package? How to Create and import package. Explain with example.	**07**

OR

Q.5	**(a)**	Write a program to display following output.	**03**

```
1
1   2
1   2   3
1   2   3   4
1   2   3   4   5
```

	(b)	Explain write(),append() and writelines () for file with example.	**04**
	(c)	Explain string searching functions with syntax and example.	**07**