GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–V (NEW) EXAMINATION – WINTER 2022

Subject Code:3151108   **Date:04-01-2023**
Subject Name:Python Programming
Time:10:30 AM TO 01:00 PM   **Total Marks:70**

Instructions:
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

			Marks
Q.1	**(a)**	Explain dictionary in python with suitable example.	**03**
	(b)	Explain the use of pass, break and continue statement in python.	**04**
	(c)	Discuss the advantage and disadvantage of python.	**07**
Q.2	**(a)**	Explain the structure of **for** loop in python with suitable example.	**03**
	(b)	Write a short note on: Bitwise operators in python.	**04**
	(c)	Write a python program to print all the prime numbers between 100 to 200.	**07**

OR

	(c)	Write a Python program to generate pyramid pattern as given below.	**07**

```
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```

Q.3	**(a)**	What are the advantage of choosing mnemonics variable name in python?	**03**
	(b)	What is different type of error in python? Explain in brief.	**04**
	(c)	Explain various type conversion function in python	**07**

OR

Q.3	**(a)**	Explain modulo operator in python with the help of suitable example.	**03**
	(b)	Explain the use of following built in function in python. max(), pow(), str(), input()	**04**
	(c)	Explain different mode for opening a file in python.	**07**
Q.4	**(a)**	Give comparison between Tuple and List in python.	**03**
	(b)	Write a python program to multiply all the numbers stored in a list.	**04**
	(c)	With the help of suitable example explain how can we read and write to a CSV file in python?	**07**

Q.4 **(a)** What is the output of following code snippet? 03

```python
def fred():
print("Zap")

def jane():
print("ABC")

jane()
fred()
jane()
```

(b) What is the purpose of "def" keyword in python? 04

(c) Explain the conversion of list to dictionary in python. 07

Q.5 **(a)** Explain various arithmetic and logical operator in python 03

(b) Explain catching exception using try and except in python. 04

(c) What is set in python? Explain various methods that can be used 07
with sets in python.

OR

Q.5 **(a)** Explain the difference between python and micro python. 03

(b) Write a short note on: Sensor programming using micro python. 04

(c) Write a python program to turn on and off LED when the button is 07
pressed. Button and LED are connected to GPIO pin.

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