

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Regular End Semester Examination – Summer 2022

Course: B. Tech.

Branch : E&TC

Semester : IV

Subject Code & Name: BTETPE405E Python Programming

Max Marks: 60

Date: 27/08/2022

Duration: 3.45 Hr.

Instructions to the Students:

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

(Level/CO) Marks

Q. 1 Solve Any Two of the following.

- A) State and explain any six features of python. CO1 6
- B) Explain input and print command in python with suitable example. CO1 6
- C) What will be the output of following print statements? CO2 6
- I. `print('GoodLuck' * 2)`
- II. `print(3-4j + 2+6j)`
- III. `print('3+4j'*int(4/2))`

Q.2 Solve Any Two of the following.

- A) Explain following operators of python with suitable examples of each. CO1 6
- I. is
- II. in
- III. not in
- B) Explain while loop with suitable example? CO1 6
- C) The distance between two cities (in km.) is input through the keyboard. CO2 6
- Write a python program to convert and print this distance in meters and centimeters.

Q. 3 Solve Any Two of the following.

- A) Explain break, continue and pass statement with suitable example of each. CO1 6
- B) Explain append() and copy() methods of list with suitable examples of each. CO1 6
- C) The length & breadth of a rectangle are input through the keyboard. CO2 6
- Write a python program to calculate and print the area & perimeter of the rectangle.

**Q.4 Solve Any Two of the following.**

- A) Explain “and, or, not” operators of python with suitable examples of each. **CO1 6**
- B) Write a python program to print following pattern (using while loop). **CO3 6**
- ```
aaaaaaa
aaaaa
aaa
a
```
- C) What are tuples? With suitable example explain how to add elements to a Tuple. **CO1 6**

**Q. 5 Solve Any Two of the following.**

- A) What are functions in python? Explain recursion with suitable example. **CO1 6**
- B) What is package? What is Python PIP? With example explain how to get list of all packages installed on your system? **CO2 6**
- C) What will be the output of following python statements? **CO3 6**
- I. `print(23 // 5)`
  - II. `print(2 << 2)`
  - III. `print(2 >> 0)`
  - IV. `print(2 ^ 2)`
  - V. `print(2 != 2)`
  - VI. `print(2 < 0)`

**\*\*\* End \*\*\***