

SECTION C**Answer any ONE question****1 X 10 = 10**

9	Apply different web frameworks (Any 2) to analyze the following problem and determine which one is more efficient: (i) Establish a single database to manage login credentials, registration details, and user roles. (ii) Automatically synchronize registration data with the login table upon successful registration. (iii) Manage user roles independently.	2	L3
10	Create a function within one of the web frameworks (Flask or Streamlit) that allows for changing the user role in plagiarism software, for example, from student to faculty, faculty to investigator, etc., through database operations. Write steps, coding and screen design.	2	L6

Revised Bloom's Taxonomy (RBT) Levels :		
L1 – Remembering	L2 – Understanding	L3 – Applying
L4 – Analyzing	L5 – Evaluating	L6 – Creating

CHRIST (Deemed to be University), Bengaluru – 560 029
Department of Computer Science
DEPARTMENT LEVEL EXAMINATION – MARCH 2024 (MODEL QUESTIONS)
UG V Semester

Programme Name: BCA

Max. Marks: 30

Course Name: Python Programming-II

Time: 1 Hr.

Course Code: BCA471

General Instructions:

- All rough work should be done in the answer script. Do not write or scribble in the question paper except your register number.
- Verify the Course code / Course title & number of pages of questions in the question paper.
- Make sure your mobile phone is switched off and placed at the designated place in the hall.
- Malpractices will be viewed very seriously.
- Answers should be written on both sides of the paper in the answer booklet. No sheets should be detached from the answer booklet.
- Answers without the question numbers clearly indicated will not be valued. No page should be left blank in the middle of the answer booklet.

Course Outcomes (COs): The students will able to

- **CO1:** Apply Object Oriented concepts in Python
- **CO2:** Develop GUI applications and Web applications using the Tkinter and Web Frameworks
- **CO3:** Analyze the data using Pandas and NumPy libraries

SECTION A

Answer ALL the questions

5 X 2 = 10

Q. No	Questions	CO	RBT
1	Explain the difference between C++, Java and Python Class with E.g.	1	L1
2	Identify the use of Regular Expression, - Meta Characters with E.g.	1	L2
3	Outline the steps for implementing different types of inheritance in a Python program.	1	L3
4	Create a Python function to validate IPv4 (E.g. 192.168.100.100) addresses using regular expressions. The function should check if the given string represents a valid IPv4 address.	1	L6
5	Create instances of the Stock class and Simulate price changes over time using classes and objects.	1	L6

SECTION B

Answer any TWO questions.

2 X 5 = 10

6	How to use combination of different layout styles in Tkinter GUI?	2	L1
7	Analyze your own strategy for building a multipurpose Tkinter app using minimal code.	2	L4
8	Create a tkinter app code that runs a function when you click a button; it should apply different styles such as colors, fonts, etc.	2	L6