BENNETT UNIVERSITY
THE TIMES GROUP

Enrolment No: _____ Name of Student: _____

Department/ School: _____

END TERM EXAMINATION ODD SEMESTER 2022-23

COURSE CODE	**CBCA223**	**MAX. DURATION**	**2 HRS**
COURSE TITLE	**Data Analysis Using Python**		
COURSE CREDIT	**2-0-4**	**TOTAL MARKS**	**15 Marks**

GENERAL INSTRUCTIONS: -

1. Do not write anything on the question paper except **name, enrolment number** and **department/school.**
2. Carrying mobile phone, smart watch and any other non-permissible materials in the examination hall is an act of **UFM.**

Q 1. Summarize the basic activities of data scientist as a part of data science pipeline? **1 mark**

Q 2. Determine the output of given python statement?

employee [(employee ['deaths'] > 400) | (employee ['deaths'] < 40)] **1 mark**

Q 3. Explain the "Histogram" and write a python code and draw a histogram for the following data distribution: **2 marks**

Class Intervals	20-30	30-45	45-60	60-70	70-80	80-90
Occurrence	10	15	25	20	25	5

Q4. What do you understand by the 'Hypothesis'? Explain Type I error and Type II error. **2 marks**

Q 5. Explain Normal distribution with its graph, properties, and equation. **2 marks**

Q 6. Write the mean and variance for Bernoulli distribution. Differentiate between Binomial and Bernoulli distribution. **2 marks**

Q 7. (a) Summarize the characteristics of NumPy, Pandas, Scikit-Learn and matplotlib libraries along with their usage in brief. **2 marks**

(b) Explain the significance of slicing operation in string of python? Write an example of slicing to fetch "city" and "pin code" from complete address of person and display it. **3 marks**

☺☺☺ALL THE BEST☺☺☺