

Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

B.Sc. (Artificial Intelligence & Machine Learning) (Sem.-4)

ADVANCE PYTHON PROGRAMMING

Subject Code : UGCA 1983

M.Code : 91712

Date of Examination : 20-12-2022

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SIX** questions carrying **TEN** marks each and students have to attempt any **FOUR** questions.

SECTION-A

1. Write briefly :

- Write two differences between Series and Data Frame.
- Name the function which is used to display first n rows in the Data Frame.
- How queries are executed in the database? Explain.
- What is the use of Scikit-learn library?
- What do you mean by categorical data? Explain.
- How to create 1D array using Numpy?
- How to reshape an array?
- How to search an element in a given array? Explain.
- List and explain array attributes.
- List and explain any two mathematical functions in Numpy.

SECTION-B

2. List and explain any five attributes of dataframe with an example to each.

3. Consider the following DataFrame "DF"

	A	B	C
0	10	20	30
1	40	50	60

- Write a statement to change values of column "C". New Values are (40, 90).
 - Write a statement to change all values of column "B" to 0.
 - Write a statement to add a new row with value (70, 80, 90)
- Explain any five statistical functions used in Data Frame.
 - How to compute statistical functions on numpy array? Explain any five functions with example to each.
 - Explain any five string functions used in Numpy with an example to each.
 - How to plot a histogram using Matplotlib? Explain. Also write a program for the same.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.