

5402/1

FACULTY OF SCIENCE
B.Sc. (III-Semester) Examination
Data Science
Paper – III
Data Engineering With Python

Time: 3 Hours]

[Max. Marks: 80

Section A – (8 x 4 = 32 Marks)

1. Answer any **EIGHT** questions.
 - (a) Write about different types of files in Python.
 - (b) Discuss about reading of data from CSV file in Python.
 - (c) What is data sequence?
 - (d) What is glob module? Explain its uses.
 - (e) Write a short note on re.compile, re.search.
 - (f) Write about named groups in Python Regular Expression
 - (g) Write about any two mathematical functions in NumPy.
 - (h) Write a python program to access a range of items in an array.
 - (i) Write a short note on Boolean array indexing.
 - (j) Give a brief note on Pyplot.
 - (k) Write a short note on creating series.
 - (l) Write a python code to draw a scatter plot.

Section B – (4 x 12 = 48 Marks)

Answer all questions

2. (a) Define JSON. Discuss about serializing with JSON with suitable example code.
Or
(b) What is Pickle Module? Explain its uses.
3. (a) Discuss in detail the functions available in Python to implement Regular expression.
Or
(b) What is NLP? Discuss various applications of NLP.
4. (a) Discuss about basic arithmetic operations of NumPy array with suitable code.
Or
(b) Discuss about of the procedure of inserting documents in MangoDB.
5. (a) What is a data frame? Discuss the procedure to create a data frame in python.
Or
(b) Explain about the functions available to handle missing data.
