[07BENG - 3141]

III/ IV B.Tech. DEGREE EXAMINATION

Computer Science and Engineering

First Semester

Open Elective

PYTHON PROGRAMMING

(Effective from the admitted batch of 2021-2022)

Time : 3 Hours

Max. Marks: 70

Question No.1 is compulsory.

Answer any FOUR from the remaining questions.

All questions carry equal marks.

Answer all parts of any question at one place.

1. Answer the following in brief:

   (a) Name three Python key words used for control flow.

   (b) Explain the if - elif - else statement in Python.

   (c) What are attributes and method in a class?

   (d) How can you create a multi - dimension NumPy array?

   (e) What is a Pandas Series?

   (f) Differentiate between loc[] and iloc[] methods in Pandas.

   (g) Describe line properties in Matplotlib.

2. (a) What is the purpose of the len( ) function when used with strings? How do you convert a string to upper case in Python?

   (b) Describe the use of placeholders in string formation. How do you format strings using the str. format( ) method?

3. (a) How do you use the break and continue statements in loops?

   (b) How do you search for a specific pattern a string using the re module? Explain the use of the match ( ) and search( ) functions in the re module.

(P.T.O.)

(g) Explain plotting a sine wave using line plot and scatter plot.

2. (a) What is list? Explain the concept of slicing and indexing with proper examples. Explain built in