005505

Jan. 2022
B.TECH (EL) 5th SEMESTER
Programming in Python (ELOE-122)

Time : 90 Minutes]   [Max. Marks : 25

Instructions :

1. *It is compulsory to answer all the questions (1 mark each) of Part-A in short.*
2. *Answer any three questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART- A

1. (a) Is Python interpreted or compiled? Give reason for your answer.   (1)

    (b) How memory is managed in Python?   (1)

    (c)   What is the difference between list and tuple?   (1)

    (d) What are List comprehensions?   (1)

    (e) What are the built-in type does python provides? (1)

    (f) What is lambda in Python? Why lambda forms in python does not have statements?   (1)

(g) What is docstring in Python? (1)

(h) How can you declare multiple assignments in one statement? (1)

(i) What is Broadcasting in NumPy arrays? (1)

(j) How can we plot a simple line graph using matplotlib? (1)

PART-B

2. (a) What are deques? Write a program to implement deques. (2.5)

(b) Let there be a list of the scores of 10 students in a Chemistry exam. Filter out those who passed with scores more than 75. (2.5)

3. (a) Explain how log files are written in Python. (2.5)

(b) Write a program to merge 2 lists by picking odd indexed element and even from second. (2.5)

4. What is dictionary? Which operations can be performed on dictionary? Give an example of ordered dictionary. Write a Python program to combine two dictionaries adding values for common keys. (5)

5. (a) Explain how code breaks can be avoided during handling exceptions in Python? (2.5)

(b) Differentiate shallow copy and deep copy by giving an example. (2.5)

6. (a) Write Python Program to Demonstrate Multiple Inheritance and explain method resolution order. (2.5)

(b) Explain numpy one dimension slicing and reshaping. (2.5)

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