UG (NEP) EVEN SEMESTER EXAMINATION, 2024

COMPUTER SCIENCE

2nd Semester

Course No. : CS-DSC – 151

(Python Programming)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

(Answer five questions selecting one from each unit)

Unit - I

1. (a) What is Python? Explain the features and applications of Python in detail. 5

   (b) Differentiate between break, continue and pass in Python with example. 9

2. (a) Explain the syntax of the following statements with example : 8
   i.) print() ii.) input() iii.) if -else iv.) if-elif-else

   (b) Describe the range statement with a suitable example. 6

Unit - II

3. (a) What is the lambda function? Write the

characteristics of a lambda function. Explain the same with an example. 7

(b) What is Package? Give an example of package creation in Python. 7

4. (a) Define function in Python? Write ites syntax. Explain the formal and actual arguments with a suitable example. 7

(b) What is module? How many ways to import module in python? Explain the same with an example. 7

Unit - III

5. (a) Differentiate between a List, Dictionary and a Tuple with an example. 7

(b) Define String? Explain the string formatting operators with example. 7

6. (a) Define RegEx/Regular expression. List various types of RegEx functions in Python and write any 4 types of RegEx function with example. 8

(b) Explain the concept of python generators with an example. 6

Unit - IV

7. (a) Write a syntax for Handling Exceptions with example: 8
i.) try ii.) try-except iii.) try-except-else
iv.) try-except-else-finally

(b) Explain the concept of global, protected and private attributes in Python with example. 6

8. (a) Define the concepts of File Handling? List various types of predefined methods for File Handling in Python and write any 4 types of File Handling function with example. 8

(b) What is Matplotlib in Python? How do you customize a plot in Matplotlib? Explain the same with an example. 6

Unit - V

9. (a) Explain the concept of array in python with example. 7

(b) Describe the concept of stack in python with example. 7

10. (a) Explain the differentiate between array and list in python with example. 8

(b) Describe the nested function with example. 6

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