CBCS SCHEME

18CS752

USN

Seventh Semester B.E. Degree Examination, Feb./Mar. 2022
Python Application Programming

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a.   List the features of Python Programming Language.   **(04 Marks)**
    b.   How Python handles exceptions? Explain with programming example.   **(08 Marks)**
    c.   Write a Python program to find the largest of three numbers.   **(08 Marks)**

OR

2   a.   Explain the Chained and Nested conditional execution statement along with syntax and flow chart.   **(08 Marks)**
    b.   Explain with example, Fruitful and Non – fruitful functions in Python. **(06 Marks)**
    c.   Demonstrate the use of break and continue keyword using a Snippet of code. **(06 Marks)**

Module-2

3   a.   Explain Definite and Indefinite loops in Python with example.   **(06 Marks)**
    b.   What are String Slices? Explain the Slicing Operator in Python with example. **(06 Marks)**
    c.   Write a Python program to count the frequency of occurrence of character within another string.   **(08 Marks)**

OR

4   a.   List and explain four built – in string manipulation functions supported by Python. **(08 Marks)**
    b.   Explain with examples read ( ) and write ( ) methods in file.   **(06 Marks)**
    c.   Write a Python program to generate and print prime numbers in a given range. **(06 Marks)**

Module-3

5   a.   What are Lists? Explain any four. List methods with examples.   **(06 Marks)**
    b.   How tuples are created in Python? Explain different ways of creating and accessing them. **(06 Marks)**
    c.   Write a Python program to count the frequency of each of the word in a given file. **(08 Marks)**

OR

6   a.   Explain Dictionaries in Python with examples.   **(08 Marks)**
    b.   Explain the need of regular expressions in Python with example.   **(06 Marks)**
    c.   Implement a Python program using Lists to store and display the average of 'N' integers accepted from the user.   **(06 Marks)**

Module-4

7   a.   What is a Class? Explain how class and object are created in Python. **(06 Marks)**
    b.   With example, explain Shallow copy and Deep copy methods in class.   **(06 Marks)**
    c.   Write a program to add two point objects by overloading + operator. Overload _ _ str_ _ ( ) to display point as a ordered pair.   **(08 Marks)**

OR

8   a.   Explain _ _ init _ _ ( ) method with example.   **(08 Marks)**
     b.   Explain Pure functions and Modifiers with example.   **(08 Marks)**
     c.   Explain type based dispatch with an example.   **(04 Marks)**

Module-5

9   a.   What is Socket? Explain how Socket connection can be established over TCP/IP connection and retrieve the data from a web page.   **(08 Marks)**
     b.   Explain the significance of XML over the web development. Illustrate with an example.
                                        (06 Marks)
     c.   Write a program to retrieve data from a webpage using urllib and to count the number of words in it.   **(06 Marks)**

OR

10   a.   What is JSON? Illustrate the concept of parsing JSON Python code.   **(06 Marks)**
     b.   Define Cursor. Explain connect , execute and close commands of databases with a suitable example.   **(08 Marks)**
     c.   Write a program to extract various parts of anchor tag using BeautifulSoup.   **(06 Marks)**

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