CBCS SCHEME CENTRAL LIBRAR 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 List the features of Python Programming Language. 1 a. (04 Marks) How Python handles exceptions? Explain with programming example. b. (08 Marks) Write a Python program to find the largest of three numbers. (08 Marks) c. OR Explain the Chained and Nested conditional execution statement along with syntax and flow 2 a. chart. (08 Marks) Explain with example, Fruitful and Non – fruitful functions in Python. b. (06 Marks) Demonstrate the use of break and continue keyword using a Snippet of code. C. (06 Marks) Module-2 Explain Definite and Indefinite loops in Python with example. 3 (06 Marks) a. What are String Slices? Explain the Slicing Operator in Python with example. b. (06 Marks) Write a Python program to count the frequency of occurrence of character within another C. string. (08 Marks) **OŔ** List and explain four built – in string manipulation functions supported by Python.(08 Marks) 4 a. Explain with examples read () and write () methods in file. b. (06 Marks) Write a Python program to generate and print prime numbers in a given range. c. (06 Marks) Module-3 5 What are Lists? Explain any four. List methods with examples. a. (06 Marks) How tuples are created in Python? Explain different ways of creating and accessing them. b. (06 Marks) Write a Python program to count the frequency of each of the word in a given file. (08 Marks) c. OR Explain Dictionaries in Python with examples. 6 a. (08 Marks) Explain the need of regular expressions in Python with example. b. (06 Marks) Implement a Python program using Lists to store and display the average of 'N' integers C. accepted from the user. (06 Marks) Module-4 What is a Class? Explain how class and object are created in Python. 7 a. (06 Marks) With example, explain Shallow copy and Deep copy methods in class. b. (06 Marks) Write a program to add two point objects by overloading + operator. Overload str () C. to display point as a ordered pair. (08 Marks)

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Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice. Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.



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- 8 a. Explain __ init __ () method with example.
 - b. Explain Pure functions and Modifiers with example.
 - c. Explain type based dispatch with an example.

(08 Marks) (08 Marks) (04 Marks)

(06 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.
 - 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.
 - 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)