USN ☐☐☐☐☐☐☐☐☐☐

18CS752

Seventh Semester B.E. Degree Examination, June/July 2023
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 rules to declare variable in python and salient features of python. **(06 Marks)**
   b. Write a python program to find biggest of three numbers accepted from the user. **(06 Marks)**
   c. Explain concept of type conversion function and math functions in python with examples. **(08 Marks)**

OR

2 a. Explain break and continue statement with example in python. **(06 Marks)**
   b. How python handles the exceptions? Explain with an example program. **(06 Marks)**
   c. What are user defined functions? Write a function compute grade that takes a score as its parameter and returns a grade as string.

Score	Grade
> = 0.9	A
> = 0.8	B
> = 0.7	C
> = 0.6	D
> = 0.6	F

(08 Marks)

Module-2

3 a. Discuss string handling methods in python with examples. **(08 Marks)**
   b. Write a python program to demonstrate counting, summing and average of elements using loops. **(06 Marks)**
   c. Write a python program to check whether given string is palindrome or not. **(06 Marks)**

OR

4 a. Explain for loop and while loop and write a program to generate Fibonacci series up to the given limit. **(08 Marks)**
   b. Write a python program to count the number of occurrences of a word in a given file. **(06 Marks)**
   c. Write a program to read through a file and look for lines of the form.
   X-DSPAM – confidence : 0.8475
   When you encounter line that starts with "X – DSPAM confidence" pull apart the line to extract the floating points numbers on the line, count there line and then compute the total of the spam confidence. **(06 Marks)**

Module-3

5 a. What are lists? Describe list methods in python. Write a program to find biggest element in the list. **(08 Marks)**
   b. How tuples are created in python? Explain different ways of accruing and creating them. **(06 Marks)**
   c. Write python program to search for lines that start with 'F' followed by 2 characters, followed by 'm' and print there lines. **(06 Marks)**

OR

6 a. What is dictionary? Write a python program to count occurrence of woods in a file and print the count. **(08 Marks)**

   b. Explain extracting data using regular expressions implement python program to find for lines having '@' symbol between non blank characters in a file. **(08 Marks)**

   c. Compare and contrast lists and tuples. **(04 Marks)**

Module-4

7 a. Explain init and str method with an example python program. **(10 Marks)**

   b. What is Operator overloading? Write python code to overload "+", "_" and "*" operators by providing the methods _ _add_ _ , _ _sub_ _ and _ _ mul_ _. **(06 Marks)**

   c. Define class and object. Explain with example. **(04 Marks)**

OR

8 a. What is a pure function? Write a python program to find duration of event if start and end time is given by defining class TIME. **(10 Marks)**

   b. Write a python program that uses date time module within a class takes birthday as input and points the age and the no of days, hours, minutes and seconds until next birthday. **(10 Marks)**

Module-5

9 a. Demonstrate with the help of python construct
      i) How to retrieve an image over HTTP
      ii) How to retrieve web pages with Urllib. **(10 Marks)**

   b. Write a note on Google Geocoding Web service. Using python supported libraries demonstrate with snippet code. **(10 Marks)**

OR

10 a. Write a python program for creating employee database, inserting records and selecting employers working in the company. **(10 Marks)**

   b. Describe creation of database table using database cursor architecture. **(10 Marks)**

* * * * *