Seventh Sem

Time 183 hrs

# Seventh Semester B.E. Degree Examination, June/July 2023 Python Application Programming

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)

- 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

CMRIT LIBRARY

- 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)

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