

# CBCS SCHEME

15CS664

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## Sixth Semester B.E. Degree Examination, Aug./Sept. 2020 Python Application Programming

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. Explain types of error with examples. (04 Marks)  
b. Explain various Names, Keywords and expressions with examples. (06 Marks)  
c. Write a python program using try and except, so that your program handles non-numeric input gracefully by printing a message and exiting the program the following shown two execution of the program  
Enter Hours : 20  
Enter Rate : nine  
Error, please enter numeric input  
Enter hours : forty  
Error, please enter numeric input. (06 Marks)

OR

- 2 a. Explain conditional execution, Alternative execution chained conditionals and nested conditionals with examples. (08 Marks)  
b. Explain break and continue statement with examples in python. (04 Marks)  
c. Explain with an example what are fruitful functions and void functions. (04 Marks)

### Module-2

- 3 a. Explain while and for loops with examples. (04 Marks)  
b. Write a python program to find the largest value from the given set of accepted values. (06 Marks)  
c. Discuss the string handling methods in python with examples. (06 Marks)

OR

- 4 a. Write a python program to check whether a given string is palindrome or not. (06 Marks)  
b. Explain with example the syntax of read (), write () methods for a file. (04 Marks)  
c. Develop a python program for creating a copy an existing file. (06 Marks)

### Module-3

- 5 a. Explain the difference between a list and a dictionary. (04 Marks)  
b. Make a list of first ten letters of the alphabet then using the slice operation do the following:  
i) Print the first three letters from the list  
ii) Print any three letters from the middle  
iii) Print the letters from 5<sup>th</sup> letters to the end of the list. (04 Marks)  
c. Discuss the lists handling functions in python with example. (08 Marks)

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

OR

- 6 a. Differentiate between list and dictionary. (08 Marks)  
 b. Define tuple, explain DSU pattern. Write a python code to determinate tuples by sorting a list of words from longest to shortest using loops. (04 Marks)  
 c. Explain the need of Regular expressions in python language. (04 Marks)

**Module-4**

- 7 a. Explain classes and attributes in python language with examples. (05 Marks)  
 b. Explain pure functions and modifiers with examples. (05 Marks)  
 c. Write a program that uses class to store the name and marks of students. Use list to store the marks in three subjects. (06 Marks)

OR

- 8 a. Explain initialization method with example. (04 Marks)  
 b. Write a class Rectangle that has attributes length and breadth and a method area which returns the area of the rectangle. (06 Marks)  
 c. What is operator overloading? Write python code to overload “+” “-” and “\*” operator by providing the methods `__add__`, `__sub__` and `__mul__`. (06 Marks)

**Module-5**

- 9 a. Write a python code for retrieving the romeo.txt file from the web and compute the frequency of each word in the file. (06 Marks)  
 b. Write a note on XML. (05 Marks)  
 c. Explain with a neat diagram of Service Oriented Architecture. (05 Marks)

OR

- 10 a. Describe creation of database table using database cursor architecture. (08 Marks)  
 b. Write a python code for creating employee database, inserting records and selecting the employees working in the company. (08 Marks)

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