



CBCS SCHEME

17CS664

Sixth Semester B.E. Degree Examination, Jan./Feb. 2021 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. Explain the skills necessary for a programmer. What is the difference between a compiler and an interpreter? (10 Marks)
- b. Explain three general types of errors encountered in python programs. Give example for each error. If occurred how do you handle them? (10 Marks)

OR

- 2 a. Write the rules of precedence followed when there is more than one operator appears in the evaluation of expression. Give two examples. (10 Marks)
- b. i) Write a program to compute gross pay by accepting hours and rate per hour from user. (10 Marks)
- ii) Write a program to convert temperature from Celsius to Fahrenheit. (10 Marks)

Module-2

- 3 a. Write a program to print the grade based on the score input from user using a function called "Compute grade".

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

(10 Marks)
- b. Write a program which repeatedly reads numbers until the users enters "done". Once "done" is entered, print out the total, count and average of the numbers. If the user enters anything other than a number, detect their mistake using 'try' and 'except' and print an error message and skip to the next number. (10 Marks)

OR

- 4 a. Explain definite loops in python. With example explain the significance of 'break' and 'continue' statements. (10 Marks)
- b. Write a program to extract user's domain address (vct.ac.za) from the below string. "From stephen.marquard@vct.ac.za sat Jan 5 09:14:16 2008" (05 Marks)
- c. Explain the use of 'append' and 'extend' list methods. (05 Marks)

Module-3

- 5 a. Is strings immutable? Justify your answer with suitable examples. Explain string slicing. (10 Marks)
- b. i) Write a program to read through a file and print the contents of the file (line by line) all in upper case. (05 Marks)
- ii) Write a program to count the number of words in the given file. (05 Marks)

OR

- 6 a. What are Dictionaries?? How to use Dictionary as a set of counter? Explain with example. (10 Marks)
- b. Write a program to count the occurrences of words in a given file using dictionaries. (10 Marks)

Module-4

- 7 a. Write a program to sort the contents of a dictionary based on the value. Assume necessary dictionary data. (10 Marks)
- b. Explain search() and findall() regular expression methods with suitable example. (10 Marks)

OR

- 8 a. With the help of an object diagram and suitable example explain how do you achieve copying an object in python. Explain shallow copy and deep copy. (10 Marks)
- b. Write a note on pure functions. (10 Marks)

Module-5

- 9 a. Explain connect, cursor, execute APIs used to interact with SQLite database. (10 Marks)
- b. Write a python program to insert and display data in 'student-info' table of SQLite database. Assume necessary attributes. (10 Marks)

OR

- 10 a. How do you parse XML and JSON objects in python? Explain with example. (10 Marks)
- b. With the help of code snippet explain how do you parse HTML and extract data using beautiful soup library. (10 Marks)
