Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2018**

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| **Code :** | **17CS2068** | **Duration :** | **3hrs** |
| **Sub. Name :** | **FUNDAMENTALS OF PYTHON PROGRAMMING** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain the arithmetic operators and the precedence rules applied during the evaluation of arithmetic expression in python. | CO1 | 10 |
| b. | Explain how is the build-inmodule included and used in python program. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Write a python program to convert a decimal number into a binary number. | CO1 | 10 |
| b. | Write a program to get 10 positive integers from user and calculate the sum of all numbers and its average using for loop. | CO1 | 10 |
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| 3. | a. | Write a python program that accepts two numbers x and y from the user and prompts the user for an arithmetic operator. The program should print the value obtained by applying that operator to x and y. | CO2 | 10 |
| b. | Discuss the various control statements of python used for iterating the statements with suitable code. | CO2 | 10 |
| (OR) | | | | |
| 4. | a. | Discuss the various selection statements supported by python for making decisions. | CO2 | 10 |
| b. | Write a python program to accept a string as input and print the characters of the string in reverse order using loop. | CO2 | 10 |
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| 5. |  | Write a python program to encrypt the entire files of text using Caesar cipher with a distance value of 3 and print the cipher text. (Eg. plain text: abc and cipher text : def). | CO4 | 20 |
| (OR) | | | | |
| 6. |  | Explain the following File input and output operations with suitable python code.   1. Write text to a file 2. Write numbers to a file 3. Read text from a file 4. Read numbers from a file | CO4 | 20 |
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| 7. | a. | Write python program to find mean and median of a set of numbers using list. | CO6 | 10 |
| b. | Define a function named sum. This function takes the low and high ranges as argument and return the sum of all numbers between low and high range. | CO6 | 10 |
| (OR) | | | | |
| 8. | a. | Differentiate List and Tuples in python with suitable code. | CO6 | 10 |
| b. | Write code snippets in python to perform the following operations.   1. Access an element of a Dictionary 2. Modifying the elements of a Dictionary 3. Delete elements from a Dictionary | CO6 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Write a python class named Circle and it is constructed by a radius and two methods which will compute the area and the perimeter of a circle. | CO7 | 10 |
| b. | Write a python program to compute the factorial of a given number using recursive function. | CO7 | 10 |