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



**End Semester Examination – Nov / Dec – 2019**

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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. | Write steps to run a Python script. | CO1 | 3 |
| b. | Explain various String pattern matching functions in Python. | CO1 | 7 |
| c. | List and explain different arithmetic operators supported by Python. | CO1 | 10 |
| **(OR)** | | | | |
| 2. | a. | Describe the features of Python. | CO1 | 10 |
| b. | Python variables do not have specific types. Justify this statement with the help of an example. | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Write a Python program to find the square root of a number. | CO5 | 10 |
| b. | Write a Python function that prints all factors of a given number. | CO5 | 10 |
| **(OR)** | | | | |
| 4. | a. | Can a Python function return multiple values? If yes, how it works? |  | 4 |
| b. | Write a Python program using while loop to print first N numbers divisible by 5. | CO2 | 16 |
|  |  |  |  |  |
| 5. | a. | What are the two arguments taken by the open() function? | CO4 | 5 |
| b. | Write a python program that counts the number of words in a file and writes in another file. | CO5 | 15 |
| **(OR)** | | | | |
| 6. | a. | How to create, raise and handle user defined exceptions in Python. | CO4 | 8 |
| b. | List and explain different arithmetic operators supported by Python. | CO | 8 |
| c. | How do you delete a file in Python? | CO4 | 4 |
|  |  |  |  |  |
| 7. | a. | Define dictionary in Python with examples. | CO6 | 5 |
| b. | Mention any 5 list methods. | CO6 | 5 |
|  | c. | Write a program in Python to delete first element from a list. | CO6 | 10 |
| **(OR)** | | | | |
| 8. | a. | Compare and contrast lists, tuples, and set. | CO6 | 6 |
| b. | Write a Python program to remove duplicates from a list of lists. | CO6 | 14 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Create a Cricle class and intialize it with radius. Make two methods getArea and getCircumference inside this class. | CO3 | 7 |
| b. | Create a Student class and initialize it with name and roll number. Make methods to : 1. Display - It should display all informations of the student. 2. setAge - It should assign age to student 3. setMarks - It should assign marks to the student. | CO7 | 13 |