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



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

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| **Code :** | **17CA2019** | **Duration :** | **3hrs** |
| **Sub. Name :** | **PROGRAMMING IN PYTHON** | **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. | Elaborate list operations and methods in python with suitable example. | CO1 | 14 |
| b. | Compare list and tuple. | CO1 | 6 |
| **(OR)** | | | | |
| 2. | a. | Discuss different loop statements with suitable example. | CO1 | 10 |
| b. | Design a program to print the grade of a student by reading the mark as input as per the following conditions:   |  |  | | --- | --- | | **Mark** | **Grade** | | 95 and above | O | | 80-94 | S | | 65-79 | A | | 50-64 | B | | Less than 50 | F | | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Construct a program using functions to calculate the factorial of a number. | CO3 | 6 |
| b. | Illustrate how exceptions are handled in python. | CO3 | 14 |
| **(OR)** | | | | |
| 4. | a. | Explain the types of inheritance with suitable example. | CO4 | 15 |
| b. | Summarize any two formal arguments. | CO3 | 5 |
|  |  |  |  |  |
| 5. | a. | Elaborate the basic file methods and modes. Construct a program to write text to a file and read the content from the file. | CO5 | 10 |
| b. | Design a registration form using tkinter. | CO6 | 10 |
| **(OR)** | | | | |
| 6. | a. | Build a GUI application with widgets Label, Checkbutton, Text, Listbox and Button using tkinter. | CO6 | 10 |
| b. | Elaborate how files are handled in python. | CO5 | 10 |
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| 7. | a. | Create a table using SQLite with fieldshospital\_id, hospital\_name and bed\_count. Perform the operations to insert and display the records. | CO5 | 15 |
| b. | Construct a simple server using twisted. | CO6 | 5 |
| **(OR)** | | | | |
| 8. | a. | Describe how communication between the client and the server are established using python. | CO5 | 15 |
| b. | List the polling event constants in the select module. | CO5 | 5 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Describe how dynamic webpages are created with CGI. | CO6 | 10 |
| b. | Design a form to pass information to a CGI script using POST method. | CO6 | 10 |