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



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

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| **Code :** | **16CA2004** | **Duration :** | **3 Hrs** |
| **Sub. Name :** | **PROGRAMMING IN C** | **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 various Operators used in C language. | CO1 | 15 |
| b. | | | Classify the different types of Computers. | CO2 | 5 |
| **(OR)** | | | | | | |
| 2 | a. | | | Explain the various types of constants and rules for constructing various types of constants. | CO2 | 12 |
| b. | | | Write a C program to find the area of a circle. (Formula: 3.14 \* r \* r). | CO1 | 8 |
|  | | | | | | |
| 3 | a. | | | With suitable syntax write a program in C to perform Arithmetic manipulation using Switch Case. | CO2 | 10 |
| b. | | | With suitable examples explain the various types of (**if** ) selection statements. | CO2 | 10 |
| **(OR)** | | | | | | |
| 4. |  | | | With suitable examples, explain the various looping or iteration statements. | CO1 | 20 |
|  | | | | | | |
| 5 | a. | | | Explain the various types of functions with suitable example. | CO3 | 14 |
| b. | | | What is recursion? Explain recursion with suitable example. | CO3 | 6 |
| **(OR)** | | | | | | |
| 6 | a. | | | Briefly discuss the various Storage classes available in C. | CO3 | 12 |
| b. | | | Write a program to find the sum of all elements stored in an array. | CO2 | 8 |
|  | | | | | | |
| 7. |  | | | Write a program to perform the following string functions:   1. Length of the string 2. Copy the string 3. Compare the strings 4. Join two strings (Concatenate). | CO3 | 20 |
| **(OR)** | | | | | | |
| 8 | | a.. | Write notes on user defined data types. | | CO3 | 6 |
| b. | Write a program to perform payroll generation using structures. | | CO2 | 14 |
|  | |  | **Compulsory:** | | | |
| 9 | | a. | Discuss the different modes of opening a file. | | CO3 | 5 |
| b. | Briefly explain the various file handling functions with examples. | | CO2 | 15 |