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



**End Semester Examination – Nov/Dec– 2017**

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| **Code :** | **14CS1001** | **Duration :** | **3hrs** |
| **Sub. Name :** | **FUNDAMENTALS OF COMPUTING AND 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. | Compare the generations of a computer. | CO1 | 10 |
| b. | Explain the usage of flowchart with an example. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Elaborate the various classifications of computer. | CO1 | 10 |
| b. | Convert the following.  i. (1001001)2 = (?)10, (?)8 ii. (725)10 = (?)8, (?)16 iii. (EF)16 = (?)2, (?)8 | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Discuss the various software terminologies. | CO1 | 10 |
|  | b. | Define the following:  i. format specifier ii. Delimiters. iii. Keywords. iv. Variables.  v. string and string terminator. | CO2 | 10 |
| (OR) | | | | |
| 4. |  | Explain the different types of operators available in C programming with example. | CO2 | 20 |
|  |  |  |  |  |
| 5. | a. | Write a C program to print the following pattern  $  $ $  $ $ $  $ $ $ $  $ $ $ $ $ | CO3 | 10 |
|  | b. | Draw the flowchart of **if..else if..** statement and explain its usage with an example program. | CO2 | 10 |
| (OR) | | | | |
| 6. | a. | Discuss in detail about multidimensional array with example. | CO2 | 10 |
|  | b. | Explain the different ways to pass arguments to functions. | CO2 | 10 |
|  |  |  |  |  |
| 7. | a. | Discuss the following storage classes with example.  i. Automatic ii. External iii. Static iv. Register | CO2 | 10 |
|  | b. | List any 5 string functions with syntax and usage. | CO2 | 10 |
| (OR) | | | | |
| 8. |  | Write a C program to perform the Matrix addition and subtraction and multiplication. | CO3 | 20 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | What is structure and union in C programming? Explain with suitable example. | CO3 | 10 |
|  | b. | Explain file pointers in C programming and write a code to read a file content. | CO2 | 10 |

ALL THE BEST