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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec – 2016**

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|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **13CS101** | **Duration :** | **3 hrs** |
| **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. | Discuss the various computer generation along with the key charateristics of the computers of each generation. | CO1 | 15 |
| b. | Explain a trypical structure of a URL. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Discuss the components of a computer system. | CO1 | 10 |
| b. | Model a flow chart and pseudo code for the following problem statement.  “Calculate the area of rectangle”. | CO2 | 5 |
| c. | Explain the features of a good programming language. | CO1 | 5 |
| 3. | a. | What are the different data types available in C programming. | CO4 | 10 |
|  | b. | Write a C program to demonstrate the usage of bitwise operators and explain. | CO3 | 10 |
| (OR) | | | | |
| 4. | a. | Explain the different types of operators available in C programming. | CO4 | 10 |
|  | b. | Discuss the structure of a C program with an example. | CO4 | 10 |
| 5. | a. | Draw the flow chart for switch case statement and explain with example. | CO3 | 15 |
|  | b. | How do you choose between **while** and **for** loops? | CO4 | 5 |
| (OR) | | | | |
| 6. | a. | Write a program to check the eligibility of a candidate to poll his vote. If the candidate age is 18 and above print “Eligible to Vote” otherwise print “Not Eligible”. | CO3 | 10 |
|  | b. | What are formatted and unformatted functions in C programming? | CO4 | 10 |
| 7. | a. | How does a function work? Explain how arguments are passed and results are returned? | CO4 | 15 |
|  | b. | What is recursion? Explain its advantages. | CO4 | 5 |
| (OR) | | | | |
| 8. | a. | Write a C program to read 10 integers in an array. Find the largest and smallest number. | CO3 | 10 |
|  | b. | Discuss storage classes with example. | CO4 | 10 |
|  | | **Compulsory:** |  |  |
| 9. | a. | What is a pointer? Explain the features of pointer. | CO2 | 10 |
|  | b. | Elaborate structure and its features also explain array of structure with suitable example. | CO4 | 10 |

ALL THE BEST