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 – April/May – 2017**

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| **Code :** | **16CS2001** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ESSENTIALS OF 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. | Elaborate various functional components of basic computer organization with the help of a neat block diagram. | CO2 | 15 |
| b. | Brief the primitive data types available in C with an example. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Distinguish the careers in information technology. | CO1 | 10 |
| b. | Draw a flowchart to check whether the value of ‘A’ is greater than the value of ‘B’. | CO3 | 10 |
| 3. | a. | Write a C program to calculate grade of students. Consider five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:  Percentage >= 90% : Grade A  Percentage >= 80% : Grade B  Percentage >= 70% : Grade C  Percentage >= 60% : Grade D  Percentage >= 40% : Grade E  Percentage < 40% : Grade F | CO3 | 15 |
|  | b. | Duplicate the way of declareing and initializing a variable in C? | CO2 | 5 |
| (OR) | | | | |
| 4. | a. | Write a program to find the sum of three numbers given as the input by the user. | CO3 | 10 |
|  | b. | Explain about goto statement in C with an example. | CO2 | 10 |
| 5. | a. | Distinguish while and do-while loop with proper example. | CO2 | 10 |
|  | b. | Discuss for loop with suitable example. | CO2 | 10 |
| (OR) | | | | |
| 6. | a. | Elusidate the four types of functions with suitable example. | CO1 | 12 |
|  | b. | Write a program to print the series of Even numbers from 1 to 100. | CO2 | 8 |
| 7. | a. | Identify and explain the functions used to perform string manipulation.   * To find the length of the string * To concatenate two strings * To copy a string * To compare two strings | CO2 | 15 |
|  | b. | Brief Enumeration with an example. | CO2 | 5 |
| (OR) | | | | |
| 8. | a. | Write a C program to swap two integer numbers. | CO3 | 10 |
|  | b. | Describe the various storage classes available in C. | CO3 | 10 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Discribe about structure in C with suitable example. | CO3 | 15 |
|  | b. | Discuss the various steps involved in software development process. | CO1 | 5 |

ALL THE BEST