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– 2017**

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| **Code :** | **13CS101** | **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. | Draw a neat diagram and explain the Basic Computer Organization. | CO1 | 12 |
| b. | Convert the following  i. (124) 10 = (?)2 ii. (325) 8 = (? ) 10  iii. (AE) 16 = (?) 2 iv. (110011) 2= (?)10 | CO1 | 8 |
| (OR) | | | | |
| 2. | a. | Discuss the various types of Internet Connections. | CO1 | 10 |
| b. | Explain the Characteristics of Computer. | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Draw a flow chart to read 5 marks as input and calculate the sum and average of the same. | CO2 | 6 |
|  | b. | Discuss the Structure of C Program with its essential sections. | CO2 | 14 |
| (OR) | | | | |
| 4. | a. | Describe in detail the basic data types in C. | CO4 | 8 |
|  | b. | Write in detail the Arithmetic, Relational and Logical Operators with suitable example. | CO4 | 12 |
|  |  |  |  |  |
| 5. |  | Briefly explain the various if statements in C using suitable examples. | CO4 | 20 |
| (OR) | | | | |
| 6. |  | Demonstrate the following loop control structures with suitable examples. while, do…while, for. | CO4 | 20 |
|  |  |  |  |  |
| 7. | a. | Briefly explain the following string functions. strlen, strcmp, strcat, strcpy | CO5 | 10 |
|  | b. | Define an array. Write a C program to find the sum of list of values stored in an array. | CO5 | 10 |
| (OR) | | | | |
| 8. | a. | Define recursion. Write a recursive function to calculate nCr . | CO5 | 10 |
|  | b. | Give a brief outline about Storage Classes in C. | CO5 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Write a C program to demonstrate the structures. | CO5 | 12 |
|  | b. | Differentiate Structure and Union. | CO5 | 8 |

ALL THE BEST