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

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**End Semester Examination – Apr/May – 2018**

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| **Code :** | **17CS1001** | **Duration :** | **3 hrs** |
| **Sub. Name :** | **FUNDAMENTALS OF COMPUTING AND PROGRAMMING** | **Max. marks :** | **100** |

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| **Q. No.** | **Questions** | **Course Outcome** | **Marks** |
| **PART-A (10X1=10 MARKS)** | | |  |
| 1. | Which memory is used to store data and instruction during execution of program? | CO1 | 1 |
| 2. | Name the generation of computers which has artificial intelligence incorporated in it | CO1 | 1 |
| 3. | What is the format specifier for float? | CO3 | 1 |
| 4. | Predict the output for the following code snippet:  int x=5;  printf(“%d”, ++x); | CO3 | 1 |
| 5. | Define an array | CO5 | 1 |
| 6. | The exit controlled loop in C is \_\_\_\_\_\_\_\_\_\_\_\_\_ | CO4 | 1 |
| 7. | Which statement is used to terminate a function? | CO5 | 1 |
| 8. | Create a user defined data type ‘mark’ which can hold integer values | CO6 | 1 |
| 9. | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can be used to store heterogeneous data under a single name | CO6 | 1 |
| 10. | The blue coloured underlined text in a web page to connect to another page is called \_\_\_\_\_\_\_\_\_\_ | CO1 | 1 |

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| **PART B(5 X 3= 15 MARKS)** | | |  |
| 11. | What are the main characteristics of fourth generation computers? | CO1 | 3 |
| 12. | Draw the truth table for bitwise AND operator | CO2 | 3 |
| 13. | Compare break and continue statements in C | CO4 | 3 |
| 14. | Discuss the operations allowed on pointers | CO5 | 3 |
| 15. | List various internet services | CO1 | 3 |

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| **PART C(5 X 15= 75 MARKS)** | | | |  |
| 16. | a. | With a block diagram briefly explain the basic computer organization | CO1 | 10 |
| b. | Describe the characteristic features of computer. | CO1 | 5 |
| (OR) | | | |  |
| 17. | a. | Discuss various classification of computers | CO1 | 7 |
| b. | Convert the following  (734)10= ( )2  (652)8 = ( )2  (B23)16 = ( )10  (1000111)2 = ( )8 | CO1 | 8 |
| 18. |  | Explain the various operators available in C with suitable examples | CO3 | 15 |
| (OR) | | | |  |
| 19. | a. | Describe the various data types in C | CO3 | 7 |
| b. | Write a C program to find the greatest of three numbers | CO2 | 8 |
| 20. |  | Explain various selection statements in C with suitable example programs | CO4 | 15 |
| (OR) | | | |  |
| 21. |  | Explain various string handling functions with suitable example programs | CO5 | 15 |
| 22. |  | Describe various types of functions in detail with suitable examples | CO5 | 15 |
| (OR) | | | |  |
| 23. | a. | Compare call by value and call by reference in function with proper example programs | CO5 | 10 |
| b. | Write a C program to find factorial of a number using function | CO5 | 5 |
| 24. |  | Summarise computer software and its types | CO1 | 15 |
| (OR) | | | |  |
| 25. |  | Explain stuctures. Construct a C program to display the student details using structures | CO6 | 15 |