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

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**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **18CS2001** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BASICS OF COMPUTER PROGRAMMING** | **Max. Marks :** | **100** |

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| **Q. No.** | **Questions** | | **Course Outcome** | **Marks** |
| **PART – A (20 X 1 = 20 MARKS)** | | | | |
| 1. | | List the parts of a computer system. | CO1 | 1 |
| 2. | | What is the use of utility software? | CO1 | 1 |
| 3. | | State the purpose of a programming language. | CO1 | 1 |
| 4. | | What is use of sizeof operator? | CO2 | 1 |
| 5. | | What are the different types of comments supported by C language? | CO2 | 1 |
| 6. | | List the different types of constants supported by C. | CO2 | 1 |
| 7. | | What is the use of scanf function? | CO2 | 1 |
| 8. | | Express the need of typecasting. | CO2 | 1 |
| 9. | | Why do we need looping statements? | CO3 | 1 |
| 10. | | List the various conditional branching statements. | CO3 | 1 |
| 11. | | Write a note on dangling else problem. | CO3 | 1 |
| 12. | | State the difference between while loop and do-while loop. | CO3 | 1 |
| 13. | | What is the use of return statement? | CO4 | 1 |
| 14. | | State the use of the storage class Auto. | CO4 | 1 |
| 15. | | How can we initialize arrays? Give an example. | CO4 | 1 |
| 16. | | \_\_\_\_\_\_\_\_\_\_ function is used to find the length of the given string.  \_\_\_\_\_\_\_\_\_\_function is used to display the reverse of the given string. | CO4 | 1 |
| 17. | | List the different areas of memory used by the computer system. | CO4 | 1 |
| 18. | | Write down the general syntax for declaring a pointer variable. | CO4 | 1 |
| 19. | | Write down the syntax of the structure. | CO5 | 1 |
| 20. | | How will you access the members of a structure? | CO5 | 1 |

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| **PART – B (10 X 5 = 50 MARKS)**  **(Answer any 10 from the following)** | | | |
| 21. | Outline the differences between application software and system software. | CO1 | 5 |
| 22. | Give a note on different types of file used in C. | CO2 | 5 |
| 23. | State the rules for forming identifiers. | CO2 | 5 |
| 24. | Write a C program to determine whether a candidate is eligible to vote. | CO3 | 5 |
| 25. | Explain the features of an if-else statement. | CO3 | 5 |
| 26. | What is the use of Switch Case statement? | CO3 | 5 |
| 27. | Write a program to list all the leap years from 1900 to 2100. | CO3 | 5 |
| 28. | Write a program to calculate the area of a circle using function. | CO4 | 5 |
| 29. | Write a program to transpose a given 3x3 matrix. | CO4 | 5 |
| 30. | Write a program using pointers to check whether the given character is a vowel or not. | CO4 | 5 |
| 31. | Write a program using structures to read and display the information about a student. | CO5 | 5 |
| 32. | Distinguish structures from unions. | CO5 | 5 |

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| **PART – C (2 X 15 = 30 MARKS)**  **(Answer any 2 from the following)** | | | | |
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| 33. |  | Elucidate the evolution of programming languages. | CO1 | 15 |
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| 34. | a. | Explicate the different types of operators supported by the C language. | CO2 | 8 |
| b. | Write a C program to find the largest of three numbers using ternary operator. | CO2 | 7 |
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| 35. |  | Write a C program to merge two integer arrays and display the merged array in reverse order. | CO3 | 15 |