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



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

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| **Code :** | **18EI3020** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ADVANCED COURSE IN EMBEDDED C** | **Max. Marks :** | **100** |

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| **Q. No.** | **Sub Div.** | | **Questions** | **Course Outcome** | **Marks** |
| **ANSWER ANY FIVE QUESTIONS (5 x 16 = 80 Marks)** | | | | | |
| 1. | a. | Develop a C program to check whether the number is odd or even. | | CO1 | 8 |
| b. | Differentiate between Global and Local Declaration and write a program to find the largest and smallest value using global declaration. | | CO1 | 8 |
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| 2. | a. | Discuss various types of decision making statements in C programming. | | CO1 | 8 |
| b. | \* \* \* \* \*  \* \* \* \*  \* \* \*  \* \*  \*  Develop C program to print the above pattern. | | CO1 | 8 |
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| 3. | a. | Write a C program to add two matrix using multi-dimensional array. | | CO2 | 8 |
| b. | Create a C program to display Largest Element of an array. | | CO2 | 8 |
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| 4. | a. | Summarize the importance of using structures and write a C program to add two complex numbers by passing Structure to a Function. | | CO3 | 8 |
| b. | Justify with example, only one union member can be accessed at a time and all members of a structure can be accessed at once. | | CO3 | 8 |
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| 5. | a. | Develop a program in C to print a string in reverse using pointer. | | CO4 | 8 |
| b. | Illustrate with example, how to declare a Pointer to Pointer. | | CO4 | 8 |
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| 6. | a. | Differentiate between union and structure in C programming. | | CO3 | 8 |
| b. | Create a C program to read and print an employee's detail using structure. | | CO3 | 8 |
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| 7. | a. | Develop a C Program to read a line from a File and display the same. | | CO5 | 8 |
| b. | Summarize four major operations of file handling system. | | CO5 | 8 |
| **COMPULSORY QUESTION (1 x 20 = 20 Marks)** | | | | | |  |
| 8. | a. | Develop a C program to toggle LED for 1 second using timer. | | CO6 | 10 |
| b. | Create a C program to interface keypad with embedded controller. | | CO6 | 10 |