

**I B.Tech I Semester Regular Examinations, January 2015****PROBLEM SOLVING USING C**

**(Common to Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science and Engineering & Information Technology)**

**Time: 3 Hours****Max. Marks: 60****Note: All Questions from Part A are to be answered at one place.****Answer any Four Questions from Part B.****PART-A****6 X 2 = 12M**

1. Write a C program to determine whether a given number is even or odd using conditional operator.
2. Distinguish between break and continue.
3. Define array. How to declare and Initialize arrays.
4. What are Dynamic Memory Allocation functions.
5. Distinguish between structure and union.
6. Write about random access file functions.

**PART-B****4 x12 = 48M**

1. a) Explain the structure of C program with examples. **8M**  
b) Write a C Program to convert given number of days into months & days. **4M**
2. a) Explain different selection statements with example programs. **8M**  
b) Write a C program to check whether a given integer is palindrome or not. **4M**
3. a) Explain different String handling functions with example. **8M**  
b) Write a program to find the smallest and largest element in a given array. **4M**

4. a) Define a pointer. How do you declare and initialize pointer variables?  
Write about pointer arithmetic operations with an example. **7M**
- b) Write a recursive program for generating Fibonacci series. **5M**
5. a) How does a structure differ from an array? Explain array of structures with a sample code. **7M**
- b) What are bit fields? Explain. **5M**
6. a) Explain file I/O functions with syntax and example. **8M**
- b) Write a C program which copies one file to another. **4M**

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