

J-242

**B. C. A. (First Semester) Examination,
Nov.-Dec. 2016**

(New Course : 2010-11)/(2012-13)

(For Regular / ATKT / Ex Students)

PROGRAMMING and PROBLEM SOLVING in C

Time Allowed : Three hours

Maximum Marks : 50

Note : Attempt all five questions. All questions carry equal marks.

Unit-I

1. What do you understand by debugging? What are the major considerations during implementation, medication and maintenance stages of program development? Discuss.

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PTO

Or

What do you understand top-down and bottom-up design?
Discuss with the help of suitable examples.

Unit-II

2. What do you understand by type conversion and type casting? Explain. Also describe about priority and associativity of operators.

Or

Write a C program using array to read any 50 numbers and then to obtain the average of these 50 numbers.

Unit-III

3. What do you understand by scope, visibility and life time rules for various types of variables in C language? Discuss. Describe call by reference calling techniques with the help of suitable examples

Or

Differentiate recursion and iteration with the help of suitable example. What do you understand by tail recursion? Explain.

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Unit-IV

4. What do you understand by dynamic memory management? Discuss various dynamic memory management functions with the help of suitable examples.

Or

How do we use 'structure within structure', 'array in structure' and array of structures? Explain with the help of suitable examples.

Unit-V

5. What do you understand by conditional compilation directives? Explain.

Or

Write a C program to create a file of numbers and copy odd number into second file and even numbers to third file.