

FACULTY OF ENGINEERING & INFORMATICS**B.E. I Year (Suppl.) (Common to all branches) Examination, December 2013****Subject: Programming in C & C++****Time: 3 Hours****Max. Marks: 75****Note: Answer all questions from Part A. Answer any five questions from Part B.****PART – A (25 Marks)**

1. What is an operating system? (3)
2. What are the different ways of creating constants in C. (2)
3. Explain the different ways of passing values to functions. (3)
4. Explain the initialization of multidimensional array in C. (2)
5. Write a program to search for a string in array of strings. (3)
6. Differentiate structure and union with example. (2)
7. What are the advantages of inline functions? (3)
8. What are the features of constructors? (2)
9. What is inheritance? Explain. (2)
10. What is dynamic binding? (3)

PART – B (50 Marks)

- 11.(a) Draw the block diagram of a computer and explain the functions of various units. (5)
(b) Explain the bitwise operators and logical operators with example. (5)
- 12.(a) Write a program to find out GCD of given two numbers using function. (5)
(b) Write a program to find sum of all numbers in an array using pointer to array. (5)
- 13.(a) Write a program to sort array of student structure based on names where student structure consists of student name, roll no. and marks in 3 subjects. (5)
(b) Explain creating, writing and reading random access files with examples. (5)
- 14.(a) Explain function overloading with example. (5)
(b) Explain the different access specifiers used in C++ with example. (5)
- 15.(a) Explain virtual function with example. (5)
(b) Write a template class to sort an array of elements of integer and float types. (5)
16. Write a program to overload >> and << for reading and writing data to I/O stream.(10)
17. Write short notes on:
 - (a) Storage classes (4)
 - (b) Static members of a class (3)
 - (c) Friend functions (3)