2	Roll No. :	Total Printed Pages :	
182	3E1482		
BEL	B. Tech. (Sem. III) (Main/Back) Examination, February - 2010 Electrical Engineering (3EE2 Computer Programming - I)		

Time: 3 Hours]

[Total Marks: 80

[Min. Passing Marks: 24

Attempt **five** questions in all. Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205)

1	Nil	2	<u>Nil</u>
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- 1 (a) What do you mean by command line argument? Write a program to calculate factorial of any input number.
 - (b) What is the use of pointer? Write a C++ program to calculate sum of two numbers using the concept of pointer.

OR

- 1 (a) What are the different types of link list? Explain each type in brief.
 - (b) Write a program to delete an element from any given position for double link list.
- 2 (a) What is the use of public, private and protected keywords in C++?
 - (b) Explain the concept of class in C++ with suitable example.

OR

- 2 (a) What are the differences between class and structure?
 - (b) Explain the concept of multipal inheritance with proper example.

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[Contd...

- 3 (a) What are the main differences between normal user define function and inline function of a class.
 - (b) What do you mean by overloading? Write a C++ program to overload any Binary operator.

OR

- 3 (a) What is the use of constructor in C++? Write a C++ program to implement the concept of constructor?
 - (b) What are the main enhancements in C++ over C in data types?
- 4 (a) What are the differences between single and multilevel inheritance?
 - (b) Write a simple C++ program which will show the concept of pointers to objects.

OR

- 4 (a) What is the difference between virtual function and pure virtual function?
 - (b) Write a program in C++ to implement the run time polymorphism.
- 5 (a) Write a C++ program to read a file and find out total number of characters, total number of line, total number of words and total number of spaces from a given file.
 - (b) What are the different types of file opening modes in C++?

OR

- 5 (a) There are 100 records present in a file. Now write a program to read these records, arrange them in ascending order and write them into a target file.
 - (b) Write a program which will explain the concept of template in C++.