## MCA 1<sup>st</sup> SEMESTER Object Oriented Prog. Methodology PRACTICAL SHEET: S3

Submission: 28th January, 3.00 Pm.

- 1. Create classes point, line, rectangle and use dynamic polymorphism to provide support for various operations like insert, delete etc.
- 2. Demonstrate the use of "this" pointer.
- 3. Overload the new operator stating its advantages.
- 4. Give a meaningful example to overload the assignment operator.
- 5. Write a program to create your own manipulator.
- 6. Implement template class "Stack" with all operations.
- 7. Implement template class "Binary Tree" with all operations.
- 8. Overload the + operator for linked list and insert the node at the appropriate position (in sorted order of any field).
- 9. Use the program of problem no. 8 to store the data in a data file. Give appropriate options for data manipulations.
- 10. Write a program to design a class having static member function named showcount() which has the property of displaying the number of objects created of that class.
- 11. Implement data files for storing information permanently for problems 1,6 & 7.