## Indian Institute of Technology, Delhi EEL 202: Circuit Theory July 28, 2014

For the graphs shown below:

- 1. Determine a tree for the graph.
- 2. Write out the matrix equations for the fundamental cut-sets method.
- 3. Write out the matrix equations for the fundamental loops method.
- 4. Replace every branch of the tree with a 1-V voltage source, and every chord outside the tree with a 1-A current source. Show that  $\Sigma v_{xy}i_{xy} = 0$ .

