1. Which of the following is an example of a graph?
   (a) Family tree  
   (b) City map  
   (c) Chemical molecule  
   (d) All the above  

   D

2. Which of the following is true about storing a graph?
   (a) The adjacency list representation usually uses a linked list for the out-neighbors.  
   (b) A linked list is the only possible implementation of a bag  
   (c) The vertices must be numbered  
   (d) All of the above  

   A

3. True/False: DAG stands for doubly ambidextrous graph

   False

4. True/False: If a directed graph contains a cycle, then there is no topological ordering.

   True

5. True/False: If a directed graph has no topological ordering, then it contains a cycle.

   True