1. When referring to Active Directory, provide a general explanation of the schema. Identify at least two things that are dictated by the schema.

2. Assume that Microsoft Exchange server is not installed on any servers in the above forest. Can the administrator of the marketing.nwtraders.msft domain successfully install this software on a server in his/her domain? Explain your answer.

3. Assume that Microsoft Exchange server is installed on a server in nwtraders.msft. Can the administrator of the sales.contoso.msft domain successfully install this software on a server in his/her domain? Explain your answer.

4. Identify the root domains in the above image.

5. Identify the forest root domain in the above image.

6. Indicate whether each of the below statements is true or false:
   a. The Administrator of the contoso.msft domain has full rights in the entire forest.
   b. The Administrator of the nwtraders.msft domain has full rights in the entire forest.
   c. The Administrator of the nwtraders.msft domain has full rights in the nwtraders.msft tree.
   d. The Administrator of the contoso.msft domain has full rights in the contoso.msft tree.
   e. Transitive trust relationships exist between all the domains in the forest.
   f. The existence of a transitive trust relationship between domains automatically gives all users in both domains permission to access the shared resources in all domains.

7. What is a trust path?

8. Assume there is a shared folder on a server in the sales.nwtraders.msft domain and also assume that a user from the sales.contoso.msft domain attempts to access that share. Explain in detail the trust path that would be followed. Include in your answer the number of domain controllers the request would pass through.

9. What is an external trust? When might one be needed?
10. Assume the following domain controllers exist in the forest. What Active Directory Data Store is stored on each server. **Fill in the below table.** Identify the data store (schema, configuration and domain data) that’s stored on each server. Include the completed table as your answer.

<table>
<thead>
<tr>
<th>Domain Name</th>
<th>Server Name</th>
<th>Active Directory Data Store</th>
</tr>
</thead>
<tbody>
<tr>
<td>contoso.msft</td>
<td>Srv1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Srv2</td>
<td></td>
</tr>
<tr>
<td>sales.contoso.msft</td>
<td>Srv1</td>
<td></td>
</tr>
<tr>
<td>nwtraders.msft</td>
<td>Srv1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Srv2</td>
<td></td>
</tr>
<tr>
<td>marketing.nwtraders.msft</td>
<td>Srv1</td>
<td></td>
</tr>
<tr>
<td>sales.nwtraders.msft</td>
<td>Srv1</td>
<td></td>
</tr>
</tbody>
</table>

11. What is a global catalog?

12. Is *your* server a global catalog server? Provide a screenshot that confirms your answer.

13. Create another custom mmc, name it Schema-Admin and add the Active Directory Schema snap-in to the custom mmc. (Note: This snap-in is not, by default, available – it must be registered.)
   a. What command did you use to register the snap-in? Include the command and it’s output.
   b. Provide a screenshot of the custom mmc which confirms that the snap-in was successfully added.

14. Using the AD Schema snap-in, view the properties of the *homeDirectory* attribute.
   a. Is it one of the attributes that is replicated to the global catalog?
   b. Is it copied when duplicating a user object?
   c. Provide a screenshot which confirms your answers to 14a & 14b.

15. Using the AD Schema snap-in, view the properties of the *description* attribute.
   a. Is it one of the attributes that is replicated to the global catalog?
   b. Is it copied when duplicating a user object?
   c. Provide a screenshot which confirms your answers to 15a & 15b.

16. What is the functional level of your domain?
   a. Provide a screenshot which shows the functional level.
   b. What Operating Systems are supported as Domain Controllers in a domain with this functional level?

   a. Provide a screenshot which confirms that you’ve raised the functional level to Windows Server 2008.
   b. What Operating Systems are supported as Domain Controllers in a domain with this functional level?