1. The remote backup site is sometimes also called the  
a) Primary Site  
b) Secondary Site  
c) Tertiary Site  
d) None of the mentioned

Answer: b  
Explanation: We can achieve high availability by performing transaction processing at one site, called the primary site, and having a remote backup site where all the data from the primary site are replicated.

2. Remote backup system must be \_\_\_\_\_\_\_\_\_ with the primary site.  
a) Synchronised  
b) Separated  
c) Connected  
d) Detached but related

Answer: a  
Explanation: We can achieve high availability by performing transaction processing at one site, called the primary site, and having a remote backup site where all the data from the primary site are replicated.

3. The backup is taken by  
a) Erasing all previous records  
b) Entering the new records  
c) Sending all log records from primary site to the remote backup site  
d) Sending selected records from primary site to the remote backup site

Answer: c  
Explanation: We can achieve high availability by performing transaction processing at one site, called the primary site, and having a remote backup site where all the data from the primary site are replicated.

4. When the \_\_\_\_\_\_\_\_\_\_ the backup site takes over processing and becomes the primary.  
a) Secondary fails  
b) Backup recovers  
c) Primary fails  
d) None of the mentioned

Answer: c  
Explanation: When the original primary site recovers, it can either play the role of remote backup, or take over the role of primary site again.

5. The simplest way of transferring control is for the old primary to receive \_\_\_\_\_\_\_\_\_\_ from the old backup site.  
a) Undo logs  
b) Redo Logs  
c) Primary Logs  
d) All of the mentioned

Answer: c  
Explanation: If control must be transferred back, the old backup site can pretend to have failed, resulting in the old primary taking over.

6. The time to process the remote backup can be reduced by  
a) Flags  
b) Breakpoints  
c) Redo points  
d) Checkpoints

Answer: d  
Explanation: If the log at the remote backup grows large, recovery will take a long time. The remote backup site can periodically process the redo log records that it has received and can perform a checkpoint, so that earlier parts of the log can be deleted.

7. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ configuration can make takeover by the backup site almost instantaneous.  
a) Hot-spare  
b) Remote  
c) Direct  
d) Spare

Answer: d  
Explanation: In this configuration, the remote backup site continually processes redo log records as they arrive, applying the updates locally.

8. A transaction commits as soon as its commit log record is written to stable storage at the primary site. This is  
a) One Safe  
b) Two Safe  
c) Two-very Safe  
d) Very Safe

Answer: a  
Explanation: The problem with this scheme is that the updates of a committed transaction may not have made it to the backup site, when the backup site takes over processing.

9. A transaction commits as soon as its commit log record is written to stable storage at the primary and the backup site. This is  
a) One Safe  
b) Two Safe  
c) Two-very Safe  
d) Very Safe

Answer: c  
Explanation: The problem with this scheme is that transaction processing cannot proceed if either the primary or the backup site is down.

10. If only the primary is active, the transaction is allowed to commit as soon as its commit log record is written to stable storage at the primary site. This is  
a) One Safe  
b) Two Safe  
c) Two-very Safe  
d) Very Safe

Answer: b  
Explanation: This scheme provides better availability than does two-very-safe, while avoiding the problem of lost transactions faced by the one-safe scheme.