Section Quiz

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Score: 80% Passing Score: 80%

Question 1: ✔ Correct

Which of the following is a recovery site that may have electricity connected, but there are no servers installed and no high-speed data lines present?

- Hot site
- Reciprocal agreement
- Cold site
- Warm site

EXPLANATION

A cold site is a recovery site that may have electricity connected, but there are no servers installed and no high-speed data lines present. A cold site does not offer an adequate route to recovery for most organizations.

A hot site is a real-time full mirror of the primary site. It is fully functional and ready for immediate use 24/7. A warm site is partially configured and may require days or weeks to bring up to production level. A reciprocal agreement is not a form of recovery site. Instead, it is a non-enforceable agreement between two companies to assist each other in the event of a disaster.

REFERENCES

12.7.2 Redundancy Facts

q_redundancy_cold_site_secp7.question.fex

Question 2: ✔ Correct

To prevent server downtime, which of the following components should be installed redundantly in a server system?

- Power supply
- RAM modules
- CD or DVD drive
- Floppy disk drive

EXPLANATION

To prevent server downtime, you should install redundant power supplies in a server system. If one fails, the other can immediately take over, allowing the server to remain running.

Because it isn't a critical component, a redundant CD or DVD drive probably isn't necessary. Unless data was shared from a disc in the drive, a failed CD or DVD drive probably won't affect the server's functionality. With most motherboards, there's no way to install redundant RAM modules. Like CD or DVD drives, the floppy disk drive isn't a critical component. A failed floppy disk drive won't bring the server down.

REFERENCES

12.7.2 Redundancy Facts

q_redundancy_dual_power_secp7.question.fex

Question 3: ✔ Correct

You have been asked to deploy a network solution that includes an alternate location where operational recovery is provided within minutes of a disaster. Which of the following strategies would you choose?

- ➡ (●) Hot site
- ( ) Warm site
- ( ) Hot spare
- ( ) Cold site

EXPLANATION

A hot site is a complete disaster recovery facility that could be fully operational within hours or minutes in the event of a disaster. This includes maintaining redundant hardware and up-to-date network data.

A warm site is a remote network location that maintains a backup of the data, but it is not always current. Data may be days or weeks old, depending on backup procedures.

A cold site provides a space and sometimes hardware in an alternate location that can be configured when needed. Returning to an operational state may take days.

A hot spare is a redundant hardware component used as a failover solution.

REFERENCES

12.7.2 Redundancy Facts

q_redundancy_hot_site_secp7.question.fex

Question 4: ✔ Correct

What is the primary security feature that can be designed into a network's infrastructure to protect and support availability?

- Periodic backups
- Switches instead of hubs
- Fiber optic cables
- ➡ Redundancy

EXPLANATION

Redundancy is the primary security feature that can be designed into a network's infrastructure to protect and support availability. This is because it identifies single points of failure.

Periodic backups are better than no backups, but real-time and off-site backups are better protections for availability. Fiber optic cables are not a real protection for a network's availability, as they only provide the security benefit of eavesdropping protection. Switches are better than hubs, but there are infrastructure security measures that provide more significant protections for availability.

REFERENCES

12.7.2 Redundancy Facts

q_redundancy_redundancy_secp7.question.fex

Question 5: ✔ Correct

Daily backups are completed at the ABD company location, and only a weekly backup is maintained at another network location. Which of the following disaster recovery strategies is ABD using?

- Hot spare
- Cold site
- Warm site
- Hot site

EXPLANATION

A warm site is a remote network location that maintains a backup of the data, but it is not always current. Data may be days or weeks old, depending on backup procedures.

A hot site is a complete disaster recovery facility that could be fully operational within hours or minutes in the event of a disaster. Employing a hot site includes maintaining redundant hardware and up-to-date network data.

REFERENCES

12.7.2 Redundancy Facts

q_redundancy_warm_site_01_secp7.question.fex

Question 6: ✕ Incorrect

Which of the following disk configurations might sustain losing two disks? (Select two.)

- [x] ~~RAID 5~~
- [ ] RAID 1+0
- [ ] RAID 0+1
- [ ] RAID 0
- [x] ~~RAID 1~~

EXPLANATION

RAID 1+0 combines disk mirroring (1) and disk striping (0). Multiple disks are configured into two mirrored arrays that are then striped across the other set. RAID 1+0 can sustain multiple drive losses as long as no mirror loses all its drives. RAID 0+1 can also continue to work if both failed disks are in the same set. But if a set in each disk fails, data is unavailable.

RAID 5 and RAID 1 can only sustain a loss of a single disk.

RAID 0 is disk striping, but RAID 0 by itself is not fault tolerant.

REFERENCES

12.7.5 RAID Facts

q_raid_raid.secp7.question.fex

Question 7: ✕ Incorrect

You have a computer with three hard disks. A RAID 0 volume uses space on Disk 1 and Disk 2. A RAID 1 volume uses space on Disk 2 and Disk 3.

Disk 2 fails. Which of the following is true?

- Data on the RAID 1 volume is accessible; data on the RAID 0 volume is not.
- ~~Data on both volumes is not accessible.~~
- Data on the RAID 0 volume is accessible; data on the RAID 1 volume is not.
- Data on both volumes is still accessible.

EXPLANATION

In this scenario, Disk 2 is shared between both volumes. If Disk 2 fails, the RAID 1 volume is still accessible because RAID 1 (mirrored) volumes can sustain the loss of a single disk. The data on the RAID 0 volume is not accessible. RAID 0 uses striping, which distributes the data evenly between multiple disks. If a single disk fails, the entire volume is lost.

REFERENCES

12.7.5 RAID Facts

q_raid_raid1_secp7.question.fex

Question 8: ✔ Correct

Which of the following drive configurations is fault tolerant?

- RAID 0
- Expanded volume set
- Disk striping
- ➡ RAID 5

EXPLANATION

The only fault-tolerant drive configuration in this list of selections is RAID 5, or disk striping with parity. Disk striping, or RAID 0, offers no fault tolerance. It only offers performance improvements. An expanded volume set offers not fault tolerance, either. An expanded volume set is a volume that spans more than one hard drive. In fact, an expanded volume set is more susceptible to problems than a single standalone hard drive.

REFERENCES

12.7.5 RAID Facts

q_raid_raid5_01_secp7.question.fex

Question 9: ✔ Correct

You have been asked to implement a RAID 5 solution for your network. What is the minimum number of hard disks that can be used to configure RAID 5?

- 2
- 3
- 4
- 5
- 6

EXPLANATION

A RAID 5 array stripes data and parity information across multiple hard disks. To complete a RAID 5 array, a minimum of three hard disks is required.

RAID 0 and RAID 1 can both be implemented with a minimum of two hard disks.

REFERENCES

12.7.5 RAID Facts

q_raid_raid5_02_secp7.question.fex

Question 10: ✔ Correct

Which of the following network strategies connects multiple servers together so that if one server fails, the others immediately take over its tasks, preventing a disruption in service?

- ➡ Clustering
- Mirroring
- Storage Area Networks (SANs)
- Adapter bonding

EXPLANATION

Clustering connects multiple servers together using special software. If one of the servers in the cluster fails, the other servers immediately take over the tasks the failed server was working on. This results in no downtime for the end user.

Adapter bonding increases the fault tolerance of a single server system by implementing multiple network boards in the system and functioning as a single adapter. Mirroring also increases fault tolerance by creating a mirror copy of the server hard drive on one or more different hard drives. Storage Area Networks (SANs) are normally used in conjunction with clustering to provide a common disk system that all servers in the cluster share.

REFERENCES

12.7.8 Clustering Facts

q_clustering_cluster_secp7.question.fex