Chapter 2: Developing the Active Directory Infrastructure Design

TRUE/FALSE

1. Data administrators do not have any access to the Active Directory infrastructure; instead, they simply manage the objects, or a subset thereof, within an Active Directory domain.

   ANS: T   PTS: 1   REF: 83

2. Each DNS namespace within the organization must be unique, and the corresponding NetBIOS names of all domains within the forests must be unique across the whole enterprise.

   ANS: T   PTS: 1   REF: 88

3. It is highly recommended that all service admin objects be segregated from the rest of the domain objects so that their attributes are not viewable by all users in the domain.

   ANS: T   PTS: 1   REF: 124

4. Objects within an OU are not accessible by forest and domain admins.

   ANS: F   PTS: 1   REF: 130

5. All inter-site connection objects are established by the Knowledge Consistency Checker (KCC).

   ANS: F   PTS: 1   REF: 138

MODIFIED TRUE/FALSE

1. Autonomy can be achieved at the service admin level, implying that domain service admins have independence from service admins in other domains, but that these service admins accept that there are admins elsewhere in the forest with greater rights. _____

   ANS: T   PTS: 1   REF: 84

2. The root domain in a forest establishes the first tree and first DNS namespace in the forest. _____

   ANS: T   PTS: 1   REF: 114

3. The functional OU model starts by creating object-type OUs at the root of the domain, and then further segregating objects below that as appropriate. _____

   ANS: F, object type

   PTS: 1   REF: 128-129

4. The first domain controller in each site (regardless of domain membership) will assume the role of the Knowledge Consistency Checker. _____

   ANS: F
   Inter Site Topology Generator

ISTG

PTS: 1   REF: 138

5. The <u>full mesh</u> topology design might be suitable for a small organization with a small number of sites and where redundancy is important. _____

ANS: T   PTS: 1   REF: 143

MULTIPLE CHOICE

1. The _____ is, by default, the location of the two forestwide Flexible Single Operations Master roles: the Schema Master and Domain Naming Master.
    a. ring topology   c. root domain
    b. hub and spoke   d. DNS

    ANS: C   PTS: 1   REF: 106

2. _____ are generally created for one of two reasons: delegation of rights or group policy.
    a. OUs   c. Subnets
    b. GPOs   d. Sites

    ANS: A   PTS: 1   REF: 119

3. The _____ starts by creating functional-based OUs at the root of the domain, and then further segregating objects below that as appropriate.
    a. autonomous   c. hybrid
    b. functional model   d. object type model

    ANS: B   PTS: 1   REF: 127

4. A(n) _____ is a useful tool for granting autonomy to a group over objects that the group manages.
    a. GPO   c. site
    b. OU   d. subnet

    ANS: B   PTS: 1   REF: 130

5. A(n) _____ is a collection of well-connected IP subnets.
    a. subnet   c. OU
    b. KCC   d. site

    ANS: D   PTS: 1   REF: 131

6. A(n) _____ is a logical collection of contiguous IP addresses, all within the same LAN segment or virtual segment.
    a. OU   c. subnet
    b. site   d. connection object

    ANS: C   PTS: 1   REF: 132

7. _____ must be defined with both a network ID and a subnet mask to uniquely identify them.
    a. Subnets   c. Sites
    b. Connection objects   d. Site links

    ANS: A   PTS: 1   REF: 132

8. _____ are used to construct optimal paths between one site and another, so that low-cost routes are used with preference above higher cost routes.
   a. Subnets   c. Costs
   b. Site link bridges   d. OUs

   ANS: C   PTS: 1   REF: 133

9. The _____ at regular intervals evaluates the site topology and available DCs and then generates intra-site connection objects for the local DC with other DCs in the same site to ensure efficient replication of Active Directory data.
   a. ISTG   c. SYSVOL
   b. KCC   d. FRS

   ANS: B   PTS: 1   REF: 137

10. The _____ is responsible for assessing the replication needs of the site in which it resides in relation to other sites and the site links established by the administrator
    a. KCC   c. FRS
    b. SYSVOL   d. ISTG

    ANS: D   PTS: 1   REF: 139

11. _____ is typically used to house scripts and group policies, which are stored on each DC on an NT file System (NTFS) partition and replicated to all DCs in the same domain using the FRS replication mechanism.
    a. KCC   c. SYSVOL
    b. Site link bridges   d. ISTG

    ANS: C   PTS: 1   REF: 140

12. _____ is used to replicate SYSVOL data between DCs in the same domain.
    a. FRS   c. Multimaster replication
    b. KCC   d. ISTG

    ANS: A   PTS: 1   REF: 141

13. A(n) _____ topology requires *2n* unidirectional site links, where *n* is the number of sites in the ring.
    a. fully meshed   c. ring
    b. hybrid   d. hub and spoke

    ANS: C   PTS: 1   REF: 142

14. A(n) _____ topology requires *n(n-1)* unidirectional site links.
    a. ring   c. hybrid
    b. mesh   d. hub and spoke

    ANS: B   PTS: 1   REF: 143

15. _____ designs offer the ability to segment data within a specific geographic area.
    a. Mesh   c. Full mesh
    b. Ring   d. Hub and spoke

    ANS: D   PTS: 1   REF: 143

16. What is the role of the Service Administrator?

a. Management and maintenance of domain controllers.
b. Management of user objects.
c. Management of group objects.
d. Management of machine objects.

ANS: A   PTS: 1   REF: 82

YES/NO

1. Although the forest owner is responsible for the operation of the forest, is it necessary for he/she to make operational changes to the environment?

ANS: N   PTS: 1   REF: 99

2. If a dedicated root domain is not used, does the first domain created assume the role of the root domain?

ANS: Y   PTS: 1   REF: 108

3. Once the appropriate sites and subnets are defined, is it necessary to establish links to determine the direction and nature of flow of Active Directory data replication between sites?

ANS: Y   PTS: 1   REF: 132

4. Should data be replicated across site links at random time intervals?

ANS: N   PTS: 1   REF: 133

5. Are inter-site connections normally able to accommodate more traffic than intra-site connections?

ANS: N   PTS: 1   REF: 141

COMPLETION

1. _____ are responsible for maintaining the Active Directory infrastructure and for ensuring that this infrastructure provides the necessary functions and services to end users.

ANS: Service administrators

PTS: 1   REF: 81

2. _____ implies that only the administrators of the resource have access and that there are no other administrators elsewhere with sufficient rights to access or manage those resources.

ANS: Isolation

PTS: 1   REF: 85

3. When designing Active Directory forests and domains, one must remember that each domain has two names: a NetBIOS name and a(n) _____ name.

ANS:
Domain Name Service

DNS

PTS: 1   REF: 104

4. The first domain deployed into any forest is known as the _____ domain.

ANS: root

PTS: 1   REF: 106

5. A ring topology of four sites requires _____ unidirectional links.

ANS:
eight
8

PTS: 1   REF: 142

MATCHING

Match each item with a statement below.

a. Resource model   f. Ring topology
b. Isolation   g. Hybrid model
c. Cost   h. Data administrator
d. Schedules   i. Dedicated root
e. ISTG

1. Exclusive access and control.
2. Used in conjunction with intervals to create a "replication timetable."
3. Involves constructing a loop with each site connected to two neighbor sites.
4. Uses a combination of any or all network topologies.
5. Will ensure that DCs in the site receive a copy of Schema, Configuration, and Local Domain partitions, while GCs receive the same and also partial copies of all other domain partitions.
6. Responsible for the management of member servers and workstations.
7. Deployed to exist as the root domain.
8. Indicates the cost of the physical links between two sites.
9. Separate forest is deployed that houses resources that relate to a specific project or business.

1. ANS: B   PTS: 1   REF: 103
2. ANS: D   PTS: 1   REF: 134
3. ANS: F   PTS: 1   REF: 142
4. ANS: G   PTS: 1   REF: 144
5. ANS: E   PTS: 1   REF: 139
6. ANS: H   PTS: 1   REF: 83
7. ANS: I   PTS: 1   REF: 106
8. ANS: C   PTS: 1   REF: 133
9. ANS: A   PTS: 1   REF: 93

SHORT ANSWER

1. What are the NetBIOS rules for Active Directory domains?

ANS:
The rules are:
   Choose names that are not likely to require change.
   Choose Internet standard characters.
   Include 15 characters or less.

PTS: 1   REF: 104

2. List two disadvantages of the single tree approach to namespace design.

ANS:
The disadvantages include:
   Disparate, autonomous businesses are constrained to using the first namespace.
   Businesses do not have autonomy within their own namespace.

PTS: 1   REF: 115

3. What is the purpose of a site?

ANS:
The purpose of a site is twofold:

A site is used as a resource locator boundary, such that   clients are only offered the services available in or assigned to their site.

A site is used as a replication boundary, such that replication can be better managed and configured.

PTS: 1   REF: 131

4. Describe two ways in which intra-site replication differs from inter-site replication.

ANS:
The differences include:

Structure: Replication topology within a site is constructed as a ring. This means that every DC in a site will have at least two in-bound and outbound replication partners.

Compression: Intra-site replication is not compressed, whereas inter-site replication traffic is compressed.

Notification: Intra-site replication uses a notification process to inform partners of changes and does not use costs or schedules.

PTS: 1   REF: 141

5. Why do intra-site replication mechanisms differ from those used in intra-sites?

ANS:
Because inter-site connections are normally able to accommodate less traffic than intra-site connections.

PTS: 1   REF: 141