Question Paper Code: 41281

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Elective

Computer Science and Engineering

14UCS902 - INFORMATION STORAGE MANAGEMENT

(Regulation 2014)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Which is used for block level communication between servers and storage?

    (a) Direct attached storage   (b) Internet protocol SAN
    (c) Storage area network   (d) Network attached storage

2. Cache can be implemented as

    (a) Cache mirroring   (b) Either dedicated cache or global cache
    (c) Cache vaulting   (d) Idle flushing

3. Multiple light beams travel inside the cable tend to collide and weaken its signal strength is known as

    (a) Signal collision   (b) Signal degradation
    (c) Modal dispersion   (d) Reflection of light

4. Which is a FC switch function that enables the nodes within the fabric to be logically segmented into groups which can communicate with each other

    (a) Zoning   (b) SAN   (c) NAS   (d) CAS

5. The goal of business continuity solution is to ensure the

    (a) Disaster recovery   (b) Disaster restart
    (c) BC planning   (d) Information Availability

6. Which enables the full backup copy to be created offline without disrupting the I/O operation on the production volume

    (a) Full backup   (b) Cumulative backup

    (c) Synthetic full backup   (d) Incremental back up

7. It provides status of various storage components and information to perform essential management activities.

    (a) Storage management   (b) Monitoring

    (c) Storage infrastructure   (d) Information management

8. It refers to availability of a component to perform a desired operation

    (a) Authorization   (b) Performance

    (c) Capacity   (d) Accessibility

9. It is a form of computing that enables the resources of numerous heterogeneous computers in a network to work together on a single task at the same time

    (a) Utility Computing   (b) Cloud Computing

    (c) Grid Computing   (d) Virtualization

10. Which is the base layer of the cloud service stack?

    (a) Paas   (b) Iaas   (c) Virtualization   (d) Saas

PART - B (5 x 2 = 10 Marks)

11. Define virtualization.

12. What is meant by SAN? List its types.

13. What is remote replication and its technologies?

14. Define cloud computing and its benefits

15. What are the primary services of security framework?

PART - C (5 x 16 = 80 Marks)

16. (a) (i) What is storage technology? Explain the evolution of storage technology with its architecture. (8)

    (ii) What are data center elements and explain its key requirements. (8)

Or

(b) (i) Explain in detail about the components of the storage system environment. (8)

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(ii) Explain in brief about RAID and its levels. (8)

17. (a) Define storage area network. Explain in detail about the fibre channel SAN components and its connectivity. (16)

Or

(b) (i) Explain in brief about the components of NAS and its implementation. (8)

(ii) What is meant by content addressed storage? Explain its architecture and object storage retrieval. (8)

18. (a) (i) What is business continuity? Explain about its terminologies and planning life cycle. (8)

(ii) What is the purpose of Backup? Explain its methods with the backup and restore operations. (8)

Or

(b) (i) Define the process of Replication. Explain in detail about local replication technologies. (8)

(ii) Explain in brief about the remote replication and its technologies. (8)

19. (a) Briefly explain the cloud service model with cloud computing characteristics and benefits. (16)

Or

(b) Explain in detail about cloud deployment models. (16)

20. (a) (i) List the storage management activities and explain them. (8)

(ii) Briefly explain Information Life cycle management with its implementation. (8)

Or

(b) Explain about the storage security domains in detail. (16)

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