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VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (CSE) III Year II-Semester Advanced Supplementary (Old) Examinations, July-2019

Information Storage Management

(Elective-I)

Time: 3 hours

Max. Marks: 70

Note: Answer ALL questions in Part-A and any FIVE questions from Part-B

Part-A (10 × 2 = 20 Marks)

1. Give an example of order processing system illustrating the core elements of data center.
2. List and elaborate the challenges faced in data storage.
3. What are the physical and logical components of connectivity?
4. Which type of Nested RAID suits better if the storage requirements has more number of reads?
5. Explain how NAS file sharing is done in Windows and Unix.
6. Define the role of Challenge Handshake Authentication Protocol.
7. In which situation can the Automatic Path Failover be employed?
8. What is meant by Serverless Backup? Illustrate with a neat diagram.
9. How does Network Virtualization effect storage management?
10. Define the different types of passive attacks on storage infrastructure.

Part-B (5 × 10 = 50 Marks)

(All bits sub-questions carry equal marks)

1. a) What are the key challenges in managing information? Explain the policies to meet them.
 b) Determine the evolution of storage solutions and give examples of where each of these solutions can be applied.
12. a) Explain the relationship between the physical and logical components of a file system.
 b) Explain the components of Intelligent Storage System with a neat diagram.
13. a) Determine the factors that affect the NAS performance and availability, in detail.
 b) With a neat diagram, elaborate FC-IP topology, performance and security.
14. a) Explain the various considerations for data backup and recovery in detail.
 b) With a neat diagram, describe the process of Storage Array based remote replication.
15. a) Explain the security implementations in storage networking.
 b) List and explain the various monitoring techniques used in storage infrastructure?
16. a) Illustrate the key components of Data Centre Infrastructure.
 b) Define and explain the fundamental laws of governing disk performance.
17. Answer any *two* of the following:
 - a) Compare and contrast between the general purpose servers Vs NAS devices.
 - b) Explain the role of SNIA Storage Virtualization Taxonomy.
 - c) Elaborate the various storage management activities performed.