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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST-3 EXAMINATION (MAY 2019)
B-Tech (8TH SEM)

Course Code: 11B1WCI835
Course Name: STORAGE NETWORKS
Course Credit: 3

Max. Marks: 35
Max. Time: 2 HRS

Note: All questions are compulsory. Show all steps for your calculation and skip syntax error (if there any).

Q1.

- a) List the various legal reasons for neglecting and having a disaster planning. What basic goals you will keep in your mind while preparing the disaster plan. [4]
- b) Discuss the storage architecture used by most of the organizations and data centers over fiber channel. List the various advantages and security mechanism of this architecture. [4]

Q2.

- a) What are the various protocols available for distributed storage networking? Present a comparative analysis view of these protocols on following parameters: bandwidth, no. of supported device, block size, bit error rate, and max distance. [4]
- b) List the various management techniques used to manage the storage networks? How these techniques are found similar with the management techniques used in computer networks? Discuss any one technique that is only used in storage networks. [4]

Q3.

- a) If we greatly simplify the OSI reference model then we can broadly divide the protocols for storage networks into three layers that built upon one another. What are these three layers? Also list the various protocols that falls under these layers. A diagram may be suitable for your answer. [4]
- b) Explain the various design parameters and technical components required for building a data centers. [3]

Q4.

- a) Explain the role of Business continuity & Disaster recovery in storage networks. List the various legal reasons for having a business continuity plan. [3]
- b) What is NAS? Compare the architecture of Fibre Channel storage area networks with NAS? List the major differences of this architecture? Explain your answer with an example. [3]

Q5.

- a) Explain "Data-deduplication" with an example. [3]
- b) What is storage virtualization? Discuss the SNIA taxonomy for storage virtualization. [3]