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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT  
TEST-3 EXAMINATION (MAY 2018)  
B-Tech (8<sup>TH</sup> SEM)

Course Code: 11B1WCI835

Max. Marks: 35

Course Name: STORAGE NETWORKS

Max. Time: 2 HRS.

Course Credit: 3

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Note: All questions are compulsory.

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Q1.

- a) A fast growing organization wants to design data center for their growth. You are required to suggest the various physical and technical measures for proper designing of data center also state after designing the data center what should be the primary goal of the organization and what other type of services could be provided through this data center. [4]
- b) Explain the role of metadata controller in storage virtualization. What are the various levels of storage virtualization that exist in storage network? [4]

Q2.

- a) Explain the role of Business continuity & Disaster recovery in storage networks. List the various legal reasons for having a business continuity plan. [4]
- b) Explain the significance of term the FCoE. Which protocol is best suited to explain the functionality of FCoE? Differentiate the role of this protocol with the other protocols that falls into the same category of storage area network. [4]

Q3.

- a) Explain the structure of data center. Which structure is implemented by banking and financial institutions? Give proper reason and also explain the necessity of green data center over traditional data centers. [4]
- b) How Infiniband support the fast data transfer rate? Explain its architecture. [5]

Q4.

- a) Explain the role of file system in context with storage networks. What are the various types of file systems used in it? Explain any one. [5]
- b) How the architecture of distributed storage network is different with traditional storage networks? List the various protocols used in DSAN. How these protocols are responsible for communicating with long distance networks? [5]