

Code No: 11SET

R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, May - 2017

**STORAGE AREA NETWORKS**

(Common to CSE, IT)

Time: 3 Hours

Max. Marks: 75

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit.

Each question carries 10 marks and may have a, b, c as sub-questions.

**PART - A**

(25 Marks)

- 1.a) What are the major physical components of a disk drive? [2]
- b) What are the solutions available for data storage? [3]
- c) Explain RAID 0? [2]
- d) What are the components of FC-SAN? [3]
- e) Write a short note on RPO? [2]
- f) Explain about RTO? [3]
- g) Explain the concept of replication technologies? [2]
- h) Write a short note on Business continuity? [3]
- i) Explain the concept of Virtualization? [2]
- j) What are the security attributes for information systems? [3]

**PART - B**

(50 Marks)

2. Explain about Hardware and software components of the host environment. [10]  
**OR**
- 3.a) What are the challenges in data storage and data management?  
b) Write a short note on Disk drive. [5+5]
- 4.a) Explain the concept of RAID.  
b) Compare and contrast the Integrated and Modular Storage Systems. [5+5]  
**OR**
- 5.a) Write a short note IP-SAN.  
b) What are the benefits of different networked storage options? [5+5]
- 6.a) List the reasons for unplanned outages.  
b) Differentiate between business continuity and disaster recovery. [5+5]  
**OR**
7. Describe single points of failure in a storage infrastructure and list solutions to mitigate these failures. [10]

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8. Briefly explain about the replication technologies and their role in ensuring information availability and business continuity. [10]

OR

9. Explain the different backup topologies. [10]

10. Describe the File-level virtualization technologies and their processes. [10]

OR

11. What is Storage Security Domain? List and analyzes the common threats in each domain. [10]

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