R13

Code No: 118ET

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year II Semester Examinations, April - 2018
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)	Define data storage.	[2]
b)	What are the logical constructs of a physical disk?	[3]
c)	What is intelligent storage system?	[2]
d)	Write about RAID 6.	[3]
e)	Discuss about impact of down time.	[2]
f)	Define Disaster recovery.	[3]
g)	What is data backup?	[2]
h)	Why do we need replication technology?	[3]
i)	What are the advantages of Virtualization technology?	[2]
j)	What is storage virtualization	[3]

PART - B

(50 Marks)

2.a) Describe in brief about the Key protocols and concepts used by each component.
b) Discuss in brief about the role of each element in supporting business activities. [5+5]

OR

3.a) Define Data center? What are the Core elements of a data center infrastructure?
b) Describe in brief about the physical components of a disk drive. [5+5]

4.a) Differentiate between FC-SAN and IP-SAN topologies.
b) Explain in brief about High-level architecture and working of an intelligent storage system. [5+5]

OR

5.a) Explain in brief about the Architecture of FC-SAN.
b) Write about the network storage options for different application environments. [5+5]

6.a) Differentiate between RTO and RPO.
b) Describe in brief about Identification single points of failure in a storage infrastructure and list solutions. [5+5]

OR

7.a) Differentiate between business continuity (BC) and disaster recovery (DR).
b) What are the advantages and disadvantages of RPO? [5+5]

8.a) Describe in brief about data replication technologies.
  b) Draw the architecture of data backup technology. [5+5]

OR

9.a) Write about different back up technologies.
  b) What is the role of replication technology in ensuring information availability? [5+5]

10.a) What are the limitations of file level virtualization technology.
  b) What are the key areas to monitor in a data center? [5+5]

OR

11.a) Describe in brief about block-level and file-level virtualization technologies.
  b) Describe in brief about the Critical security attributes for information systems. [5+5]

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