

M. Tech. –III (Computer Engineering) (CBCS – 2015 Course) :
SUMMER - 2019

SUBJECT: ELECTIVE – I: INFORMATION STORAGE MANAGEMENT

Day: Friday
Date: 17/05/2019

S-2019-3448

Time: 11.00 AM TO 02.00 PM
Max Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**
 - 2) Figures to right indicate **FULL** marks
 - 3) Assume suitable data if necessary
 - 4) Answer to both the sections should be written in **SAME** Answer book.
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SECTION - I

Q.1 What is Data? How data is different from information? Describe in detail the different sources of data. **(10)**

OR

Q.1 What is Datacenter? With a neat diagram elaborate on the key characteristics of data center elements. **(10)**

Q.2 Describe in detail the various array caching properties and algorithms. **(10)**

OR

Q.2 Describe in detail the architecture of the Intelligent disk subsystem with neat diagram. Also explain how the disk storage systems are classified? **(10)**

Q.3 Explain in detail the Network attached storage (NAS) hardware architecture and NAS software architecture. **(10)**

OR

Q.3 Elaborate in detail the layers of FC protocol stack with a neat diagram. **(10)**

SECTION – II

Q.4 What do you understand by the term information Availability? Explain in detail the following: **(10)**

- a) Causes of information unavailability.
- b) Measuring information Availability.

OR

Q.4 What is the purpose of performing operations backup and disaster recovery? Explain. Also differentiate between RPO and RTO. **(10)**

Q.5 Explain in detail the SMI-S with neat diagram. Also list down all the features of the SMI-S that help in simplifying the SAN management. **(10)**

OR

Q.5 Describe in detail any two storage management and any two storage monitoring activities with an example. **(10)**

Q.6 What is cloud computing? What is its importance? Describe in detail its essential characteristics, merits and demerits. **(10)**

OR

Q.6 Explain in detail the cloud architecture with suitable block diagram. Also enlist and explain the various service models facilitated by cloud computing. **(10)**

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