

(3Hours)

[Total Marks: 75]

N. B.: (1) All questions are compulsory.

(2) Make suitable assumptions wherever necessary and state the assumptions made.

(3) Answers to the same question must be written together.

(4) Numbers to the right indicate marks.

(5) Draw neat labelled diagrams wherever necessary.

(6) Use of Non-programmable calculators is allowed.

Q1. Attempt the three of the following.

15 Marks

- Define Data. Explain the classification of data.
- What is Data Center? Explain the core elements of Data Center.
- What is virtualization? Explain the kinds of virtualization techniques.
- Explain physical components and Interface protocols used for communication.
- Explain the physical structure of the disk drive.

Q2. Attempt the three of the following.

15 Marks

- Explain Direct Attached Storage. Write benefit and limitation of DAS.
- Explain the role of SSD in increasing the performance of disk.
- Explain RAID system provides security to data.
- Write about the components of the intelligent storage system.
- Explain Cache management system.

Q3. Attempt three of the following.

15 marks

- Explain High-End storage system
- How Fiber Channel increased the performance of the network.
- Explain Zoning function used in Fiber Channel.
- Explain Mesh topology. Write advantages of mesh topologies.
- What is SAN? How it is implemented.

Q4. Attempt three of the following.

15 marks

- Explain ISCSI. Write about the components of ISCSI.
- How ordering and numbering techniques work in ISCSI.
- Explain how FCIP is used in SAN to send data to longer distances.
- Explain NAS devices. Write benefits of using NAS devices
- Write how file system sharing works with the network.

Q5. Attempt three of the following.

15 marks

- Explain the concept of object-based storage and explain its components.
- Explain Content-addressed storage.
- How data is accessed from the Unified Storage system.
- Explain the Business Continuity Planning life cycle.
- Write note on the replication system.
