# SAN SIMPQB- 18 SCHEME

#### BY TIE REVIEW TEAM

## Average time to be spent per module- 60 Mins

#### Module-1

- 1. Explain the evolution of Storage Architecture.
- 2. show the core elements and key characteristics of the Data Center with a neat diagram 3. Explain the various factors of Disk Drive Performance.

Disk Service Time: Seek Time, Rotational Latency, Data Transfer Rate

Disk I/O Controller Utilization

4. Explain the components of Disk Drive

Platter, Spindle, Read/Write Head, Actuator Arm Assembly, Drive

Controller Board, Physical Disk Structure

5. Illustrate the popular interface protocols used between the host and storage communication

#### Module-2

- 1. Explain the components and Types of Intelligent Storage Systems
- 2. Explain read and write cache operation with a diagram
- 3. Explain the RAID techniques with suitable diagrams Striping, Mirroring, Parity with diagrams
- 4. List out Comparisons between different RAID levels
- 5. Differentiate between RAID 5, RAID 6, RAID 0 + 1, RAID 1+0 WRT reading performance, write performance and protection.
- 6. Explain the components of Fibre Channel SAN
  Node Ports, Cables and Connectors, Interconnect Devices, SAN Management
  Software

#### Module-3

- 1. Define NAS. List the benefits of NAS. Explain different NAS implementations in detail.
- 2. Discuss the factors affecting NAS performance and Explain the components of NAS
- 3. Define iSCSI and its components
- 4. Explain iSCSI Protocol Stack and iSCSI PDU

- 5. Compare general-purpose servers with NAS Devices with an illustration
- 6. Discuss NAS File sharing protocols
- 7. Define FCIP, Explain FCIP Protocol Stack

# **Module-4**

- 1. Explain Backup architecture with backup and restore operations
- 2. Discuss different backup Topologies.
- 3. Explain BC Terminology in detail
- 4. Explain fault tolerance mechanisms OR Failure Analysis
- 5. What is Business Continuity? Explain BC Planning Life Cycle with a neat diagram.

## Module-5

- 1. Write a note on risk trade. Explain in detail.
- 2. Write short notes on Kerberos and the authentication process in Kerberos
- 3. Explain Storage array-based local replication with a diagram
- 4. Explain Local replication Technologies and their uses
- 5. Explain different modes of remote replication and remote replication Technologies 6. Explain Security threats in application access domains and Explain Security implementation in Storage Networking