

AN-SC. I.T. Sem-IV (60:40) date - 16/01/2025

(2 Hours)

[Total Marks: 60]

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 two of the following.**

12 marks

- Explain RAID.
- Explain SAN Topologies.
- Explain NAS Devices.
- Explain LVM Based Replication and Advantages of LVM.

**Q2. Attempt the two of the following.**

12 marks

- Explain role of Managing and Monitoring the Storage Infrastructure.
- Differentiate Public Cloud, Private Cloud, Community Cloud.
- Compare between Virtual and Traditional Storage.
- Write a note on Active Array.

**Q3. Attempt the two of the following.**

12 marks

- Explain Host Based Local Replication.
- Explain SAN Security Architecture.
- Explain Application Database Management System (DBMS).
- Explain Transmission Selection and Congestion Notification.

**Q4. Attempt the two of the following.**

12 marks

- Draw and explain FCoE Frame Structure.
- Explain Architecture Components of OSD Object Storage.
- Explain Authentication and Authorization Kerberos Network.
- Explain Memory Virtualization.

**Q5. Attempt the two of the following.**

12 marks

- Explain FCIP Protocol Stack.
- Explain VMware vShield.
- Explain Cloud Challenges Consumers Providers..
- Explain with example Security at the Network Level Security at the Storage.

\*\*\* ALL THE BEST \*\*\*