

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
EIGHTH SEMESTER B.TECH DEGREE EXAMINATION(S), OCTOBER 2019

Course Code: IT482

Course Name: Information Storage Management

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks.

Marks

- | | | | |
|---|----|---|------|
| 1 | a) | How to enable the connectivity and communication between host and storage? | (8) |
| | b) | Write notes on: Virtualization and Cloud. | (7) |
| 2 | a) | Write down the features and key components of Intelligent Storage System. | (12) |
| | b) | What are the benefits provided by an intelligent storage system to an organization? | (3) |
| 3 | a) | Differentiate Software RAID and Hardware RAID. | (5) |
| | b) | How is parity calculated in RAID? | (2) |
| | c) | Explain various stages of Information Life Cycle. | (8) |

PART B

Answer any two full questions, each carries 15 marks.

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|---|----|--|------|
| 4 | a) | Explain fibre channel architecture in detail. | (12) |
| | b) | Write the different ports used in Switched Fabric. | (3) |
| 5 | a) | What are the different File sharing protocols used in NAS? | (8) |
| | b) | What do you mean by Path maximum transmission unit discovery? | (3) |
| | c) | What is Link aggregation? | (4) |
| 6 | a) | Explain the various network-based Virtualization techniques used in SAN environment. | (8) |
| | b) | What are the key components of Unified storage system? | (7) |

PART C

Answer any two full questions, each carries 20 marks.

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|---|----|---|-----|
| 7 | a) | Define Information Availability (IA). | (5) |
| | b) | How to measure Information Availability? A system has three components and requires all three components to be operational 24 hours, Monday through Friday. Failure of component 1 occurs as follows:
1) Monday = No failure.
2) Tuesday = 5 a.m. to 7 a.m. | (6) |

3) Wednesday = No failure.

4) Thursday = 4 p.m. to 8 p.m.

5) Friday = 8 a.m. to 11 a.m.

Calculate the MTBF and MTTR of component 1.

- c) What are the important terminologies used in Business Continuity? (9)
- 8 a) What are the different purposes of Backups? (5)
- b) Write the different technologies used for Local Replication. (5)
- c) Explain the security domains of Storage Management Environment. (10)
- 9 a) Explain the three key elements of the risk triad. (6)
- b) Explain different storage management activities performed in data center. (10)
- c) Why are information security frameworks necessary? (4)
