Reg No.:_____          Name:_____

## APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Eighth semester B.Tech degree examinations, September 2020

### 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) | Explain memory virtualization in detail. | (4) |
| b) | Explain data centre infrastructure. | (5) |
| c) | Explain data and list the factors that have contributed to the growth of digital data. | (6) |
| 2 a) | Briefly explain about intelligent storage system. | (10) |
| b) | Differentiate between software RAID and hardware RAID. | (5) |
| 3 a) | Write a short note on information life cycle. | (7) |
| b) | What are the advantages of a virtualised data centre over a classic data centre? | (4) |
| c) | Explain the process of data recovery in case of a drive failure in RAID 5. | (4) |

### PART B

*Answer any two full questions, each carries 15 marks.*

| | | |
|---|---|---|
| 4 a) | Write a brief note on FC architecture. | (10) |
| b) | What are the components of an FCoE network? | (5) |
| 5 a) | Describe the key features of CAS. | (8) |
| b) | What is NAS? Explain any six benefits of NAS. | (7) |
| 6 a) | How data can be accessed from a unified storage? | (3) |

b)   Explain the three common NAS implementation in detail.                          (9)

c)   List and explain the need for IP SAN.                                            (3)

## PART C

### *Answer any two full questions, each carries 20 marks.*

7 a)   Describe the different stages of BC planning life cycle.                        (10)

b)   A system has three components and requires all three to be operational        (10)
during 8 a.m. to 5 p.m. business hours, Monday through Friday. Failure of
component 2 occurs as follows:

Monday = 8 a.m. to 11 a.m.

Tuesday = No failure

Wednesday = 4 p.m. to 7 p.m.

Thursday = 5 p.m. to 8 p.m.

Friday = 1p.m. to 2p.m.

Calculate the availability of component 2.

8 a)   List down the key management activities of storage infrastructure.            (6)

b)   Differentiate assets, threats, and vulnerability.                             (5)

c)   Explain information security framework.                                        (4)

d)   Define i) Network infrastructure integrity                                     (5)
ii) Storage network encryption

9 a)   With the help of a neat diagram, explain remote replication technologies.     (8)

b)   Describe the various steps of backup operation.                                (7)

c)   What are the different terms that can be used to define information          (5)
availability?

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