## **Question Paper**

Exam Date & Time: 23-Apr-2018 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

## SCHOOL OF INFORMATION SCIENCES (SOIS) SECOND SEMESTER MASTER OF ENGINEERING- ME COMPUTING TECHNOLIOGIES AND VIRTUALIZATION DEGREE EXAMINATION-APRIL 2018 Monday, 23 April 2018 Time: 10:00am to 1:00pm Storage Area Networks [VIR 614]

Marks: 100

Duration: 180 mins.

(2.5 X <sup>(10)</sup>

## Answer all the questions.

1)	Define

- 4 = 10 Marks)
- i. Business continuity (BC)
- ii. Mean Time Between Failure (MTBF)
- iii.Mean Time to Repair (MTTR)
- iv. Business continuity (BC) Terminology
- Describe Redundant Array of Independent Disks (RAID) and <sup>(10)</sup>
  its various levels
- <sup>3)</sup> What are the parts of an Intelligent Storage System, <sup>(10)</sup> explain?
- <sup>4)</sup> Describe connectivity options of Storage Area Network (10) (SAN)
- <sup>5)</sup> Define Network Attached Storage (NAS) and briefly explain <sup>(10)</sup> its components and benefits
- <sup>6)</sup> List components and connectivity options of Internet Small <sup>(10)</sup> Computer System Interface (iSCSI)
- <sup>7)</sup> Explain the features and benefits of a Content-Addressed <sup>(10)</sup>
  Storage (CAS) based storage strategy
- <sup>8)</sup> Describe File Level Virtualization technologies and its (10) implementation
- <sup>9)</sup> Describe backup/recovery operations. Explain backup <sup>(10)</sup> topologies
- <sup>10)</sup> What is file system snapshots? Explain its working with <sup>(10)</sup> example

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