Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 40368

M.E./M.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2018.

Elective

Computer Science and Engineering

CP 5076 — INFORMATION STORAGE MANAGEMENT

(Common to M.E. Computer Science and Engineering (With Specialisation in Networks)

(Regulations 2017)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   What is the use of data creation?

2.   List the challenges and solutions available in data storage.

3.   Differentiate Physical and Logical components.

4.   List the major physical components of a disk drive.

5.   Write various applications of environments in networks.

6.   What is NAS?

7.   Differentiate Business Continuity and Disaster Recovery.

8.   What are the key management tasks in a data center?

9.   What is information security?

10. Compare file level and block level virtualization.

PART B — (5 × 13 = 65 marks)

11. (a) Explain the challenges in data creation and data management process with example.   (13)

Or

(b) What are the core elements of a data centre infrastructure? Explain each element role in business activities.   (13)

12. (a) Explain hardware, software, key protocols and components of storage system architecture in detail.   (13)

Or

     (b) What is high level architecture and explain the working principles of intelligent storage system.   (13)

13. (a) Explain FC-SAN architecture, storage and topologies in detail.   (13)

Or

     (b) How the CAS will work and explain the applications and options in detail?   (13)

14. (a) Explain the architecture of backup and recovery process with example.   (13)

Or

     (b) Explain key management and storage process in data center.   (13)

15. (a) Explain the various attributes of critical security of information systems in detail.   (13)

Or

     (b) What is virtualization? Explain the various virtualization types with example.   (13)

PART C — (1 × 15 = 15 marks)

16. (a) What is RAID? Compare and Correlate each RAID levels with examples.   (15)

Or

     (b) Construct Information Storage Architecture for Hospital Processing including business continuity Disaster Recovery, Backup and security Policies.   (15)