ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27
MSc – III SEMESTER
END SEMESTER EXAMINATION: NOVEMBER 2020
CSDE 9418- DATA STORAGE TECHNOLOGIES

Time- 2 1/2 hrs.   Max Marks-70

This question paper contains 1 page and 1 section.

Answer any seven of the following questions: (10*7=70)

1. A) Describe Big Data and its eco system in detail.   [5]
    B) Identify various data centre infrastructure elements and their requirements in storage
       management.   [5]

2. A) what is the need of Zone bit recording? Explain.   [4]
    B) Which components constitute disk service time? How?   [6]

3. How does disk reliability is addressed in RAID levels? Give a comparative analysis of RAID
    4 and RAID 5 in terms of read efficiency, write efficiency, fault tolerance and usable capacity.   [10]

4. Explain read and write operation of cache in Intelligent Storage System.   [10]

5. A) Illustrate Fibre Channel Addressing.   [5]
    B) Mention five benefits and five limitations of using FC-SAN over IP-SAN.   [5]

6. A) What does the FCoE technology use to overcome its lossy nature of transmission?   [7]
    B) Compare General purpose servers versus NAS Devices   [3]

7. A) Discuss the evolution of networked storage and briefly outline its architecture along with
      description of FC-SAN.   [8]
   B) What benefit File level virtualization offers?   [2]

8. What are the different NAS implementations? Explain with diagrams.   [10]

9. A) Briefly describe the key management principles in detail.   [7]
   B) How a Local business continuity technique differs from Remote business
      continuity techniques?   [3]

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