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Course Code:18CS822

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, CANARA ENGINEERING COLLEGE

Programme: B.E. (CS&E)

Semester : VIII

CIE: TEST-1 Month: APRIL 2022

Duration: 1 Hour 30 min

Course Title : Storage Area Networks

Max. Marks: 50

Note: Answer any ONE full question from each part

Q. No.	Question	Marks
Part-A		
✓ 1.a	Explain with neat diagram the Evolution of storage Architecture	
✓ 1.b	Explain the Core Elements of Data center and key characteristics of Data center.	12
✓ 1.c	List and explain the key management activities of a data center.	12
		6
OR		
2.a	Explain the concept of Disk partitioning and concatenation.	
2.b	With a neat diagram explain the Process of mapping user files to disk storage	12
2.c	Explain Internal and external DAS architecture	12
		6
Part-B		
✓ 3.a	With a neat diagram explain the components of RAID Array.	5
✓ 3.b	Consider an application that generates 11,200 IOPS, with 60 percent of them being reads. i) Show the disk load in RAID1, RAID5 and RAID6 If a HDD with the specification of maximum 130IOPS for the application needs to be used. ii) Show the number of disks required to meet the workload for RAID1, RAID 5 and RAID6.	7
✓ 3.c	Illustrate the following RAID levels: RAID1, RAID1+0, RAID0+1,RAID3 .	8
OR		
4.a	Explain Mirroring Technique.	5
4.b	Consider the problem on Consider an application that generates 7200 IOPS, with 60 percent of them being reads. i) Show the disk load in RAID1, RAID5 and RAID6. If a HDD with the specification of maximum 180 IOPS for the application needs to be used, ii) the number of disks required to meet the workload for RAID1, RAID 5 and RAID6.	7
4.c	Explain with neat block diagram the components of Intelligent storage system	8

USN 4 C B 1 8 C S 0 8 5

Course Code: 18CS11

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, CANARA ENGINEERING COLLEGE

Programme: B.E. (CS&E) Semester: VIII

CIE: TEST - I

Month: APRIL 2022

Course Title: INTERNET OF THINGS

Duration: 1.5 HOUR

Max. Marks: 50

Note: Answer any ONE full question from each part

Q. No.	Question	Marks	CO	RBTL
PART - A				
✓ 1.a	Explain the genesis of IOT	10	1	2
✓ 1.b	What does IOT digitization mean? Elaborate on this concept	10	1	1
✓ 1.c	Compare different IOT architectures	10	1	2
OR				
2.a	List the challenges in the field of IOT	10	1	1
2.b	Explain the drivers behind new network architectures	10	1	2
2.c	Explain a simplified IOT architecture	10	1	2
PART - B				
3.a	List six categories of sensors	10	2	1
✓ 3.b	Explain the characteristics of smart objects	10	2	2
OR				
4.a	List and explain the trends in smart objects impacting IOT.	10	2	2
4.b	Explain six sensor types	10	2	2