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BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2024

2021 ADMISSIONS REGULAR

SEMESTER VI - BCA (Cloud Technology and Information Security Management)
BCA6B24CB18 - Fundamentals of Data Center

Time: 3 Hours

Maximum Marks: 80

Part A

I. Answer any Ten questions. Each question carries 2 marks

(10x2=20)

- 1. What is an In-House data center?
- 2. Define data center.
- 3. Explain the purpose HVAC.
- 4. List the factors that decide power supply needs in a data center.
- 5. What are the expenses covered by run budget?
- 6. Explain flexibility feature in data center design.
- 7. Distinguish between point load and static load.
- 8. What is scalability feature in data center design?
- 9. Explain internet data centers.
- 10. What is data mirroring and replication.
- 11. List the techniques used in storage array based replication.
- 12. What are the factors that define information availability?

Part B

II. Answer any Six questions. Each question carries 5 marks

(6x5=30)

- 13. Differentiate between Co-location and Managed hosting data center facility.
- 14. List and explain segments in access layer.
- 15. List and explain types of budgets.
- 16. Compare the uptime requirements of data center tiers.
- 17. Write notes on guidelines for planning the data center design.
- 18. Distinguish between hard and raised floors. Mention their merits and demerits.
- 19. Describe software defined data centers.
- 20. Explain extranet server farm.
- 21. Write note on Storage array based local replication.

Part C

III. Answer any Two questions. Each question carries 15 marks

(2x15=30)

- 22. Differentiate between client-server and n-Tier application architecture models.
- 23. Explain the requirements in designing a data center.
- 24. Explain data center services in detail.
- 25. Write a note on backup and recovery. Explain the various backup technologies.

