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# BCA DEGREE END SEMESTER EXAMINATION - MARCH 2020 SEMESTER 4 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY

**COURSE: 16U4VCBCA2: FUNDAMENTALS OF DATA CENTRE** 

(Common for Regular 2018 Admission and Improvement / Supplementary 2017/2016 Admissions)

Time: Three Hours Max. Marks: 75

## Section A Answer All (1 marks each)

- 1. Define thick client.
- 2. What are Single-mode fibre links?
- 3. What do you mean by plenum?
- 4. Define an electrical wireway.
- 5. What is the typical dimension of the tiles found in raised floors?
- 6. Write any 2 functions provided by Internet Edge module.
- 7. What is the use of Intrusion Detection Systems?
- 8. What is DMZ?
- 9. Define the following terms:
  - a) System Uptime.
  - b) System downtime.
- 10. Define tape mounting.

 $(1 \times 10 = 10)$ 

# Section B Answer any 8 (2 marks each)

- 11. Define a Data Centre. Write any 3 the top data centre providers.
- 12. What are the 3 tiers of n-tier model?
- 13. Write a note on Tier I data centre infrastructure.
- 14. What do you mean by redundant capacity of a data centre?
- 15. Write any 2 guidelines that can be followed while designing a data centre?
- 16. What is the use of plenum space in a data centre?
- 17. Define the following terms:
  - a. Server Farm
  - b. Firewalls
  - c. Load balancers
- 18. What is VASAN?
- 19. Differentiate local replication and remote replication?
- 20. What is logical corruption?

 $(2 \times 8 = 16)$ 

#### Section C Answer any 5 (5 marks each)

- 21. What are the roles of data centres in the service provider environment?
- 22. A data centre should not be located in close proximity to the Electrical railways. Why?
- 23. What is an Uptime Institute? Also write its functions also.
- 24. Explain the framework of raisd floor.
- 25. What is Network virtualisation?
- 26. What are the operations used to copy source data to the target in pointer based virtual replication.
- 27. Explain Pointer based full volume replication with diagram.

 $(5 \times 5 = 25)$ 

### Section D Answer any 2 (12 marks each)

- 28. Write a short note on Access Layer of Data Center architecture.
- 29. What are the Characteristics of an Outstanding Design? Explain them.
- 30. Explain Access Layer Segments with a neat diagram.
- 31. Differentiate Array-based asynchronous remote replication and Array-based synchronous remote replication

 $(12 \times 2 = 24)$