Reg. No ....   Name **23U464**

B C A DEGREE END SEMESTER EXAMINATION : MARCH 2023
SEMESTER 4 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY
COURSE : **19U4VCBCA2: FUNDAMENTALS OF DATA CENTRE**
(For Regular - 2021 Admission and Improvement / Supplementary - 2020 Admission)

Time : Three Hours   Max. Marks: 75

PART A
Answer All (1 mark each)

1. Define bare metal server.
2. SATA stands for?
3. What is the measuring unit of data transfer?
4. Define hypervisor.
5. Define the goal of a data center.
6. What do you mean by Broadcast suppression in data center?
7. What is managed hosting?
8. Expand term HVAC in data center.
9. Define NFV.
10. What was the main purpose of SDN?

                                                      (1 x 10 = 10)

PART B
Answer any 8 (2 marks each)

11. What are the functionalities of Neutron API?
12. What is cloning in storage?
13. Why do we need to use redundancy protocols that are used in the aggregation layer?
14. What do you mean by backend segment in a data center?
15. What are the data center transport technologies?
16. Define PICe and its functionality.
17. Narrate the networked business uses of a data center.
18. What are the functionalities of OVN?
19. What are the procedures of snapshots in storage?
20. What is the difference between docker container and hypervisor?

                                                     (2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. What are the benefits of RoCE?
22. What is Type 2 hypervisor? Explain its components.
23. Briefly describe about Storage Layer of a data center.
24. Write any two storage level in detail.
25. Explain the architecture of OVS with neat diagram.
26. Explain in detail different tier of data center model.
27. What do you mean by Thin and thick provisioning in storage?

                                                     (5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Explain in details VM components and its architecture layers with neat diagram.

29. Explain east – west segmentation in detail.

30. Explain in details with neat diagram Moreland's n-tier Architecture of data center.

31. Illustrate different technology used by existing data centers.

(12 x 2 = 24)