Reg. No ....   Name **23U548**

B C A DEGREE END SEMESTER EXAMINATION : NOVEMBER 2023
SEMESTER 5 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY
COURSE : **19U5VCBCA3 : PRINCIPLES OF VIRTUALIZATION**
(For Regular 2021 Admission and Supplementary 2020/2019/2018/2017/2016 Admissions)

Time : Three Hours   Max. Marks: 75

PART A
Answer All (1 mark each)

1. What is the expansion of BIOS?
2. List some of the examples of hardware-assisted virtualization technology by different vendors.
3. List out any four hypervisor vendors.
4. What do you mean by server consolidation?
5. What is the use of virtual machine snapshot?
6. Define the term 'Cloud'.
7. Which function is used as the monitoring tool of XenDesktop?
8. List any four Virtualization technologies.
9. How can we classify the consolidation projects according to Gartner research?
10. Which component is responsible for enabling single Sign-on for users?

(1 x 10 = 10)

PART B
Answer any 8 (2 marks each)

11. Define a) Host machine b) Guest O.S.
12. Compare between internal private network and private virtual network.
13. How can the virtualisation play a major role in software development and testing?
14. How can you install O.S in your virtual machine?
15. What are the different security features provided by ESXi?
16. List down the limitations of VMware.
17. List the merits of hardware virtualization technology in a virtualization environment.
18. What does it mean if the network adapter connection to the virtual machine is "Microsoft Lookback Adapter"?
19. What is the significance of RDS in RemoteApp?
20. What is the functionality of the RD connection broker?

(2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. Compare and discuss Dropbox LAN Sync and Bit Torrent Sync.
22. Discuss virtual machine configuration.
23. Explain in detail the classification of reports in remote application servers.
24. Explain the different steps for planning server consolidation.
25. Summarize on Citrix XenDesktop.
26. Differentiate between adaptive computing and on-demand computing.
27. Explain how you create a host machine.

(5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Explain in detail about the different performance counters to monitor the performance in Hyper-V Server.

29. Analyse how virtual operating systems in VMWare help users.

30. Elaborate on following virtualization techniques with suitable diagrams.
    i) Hardware assisted CPU Virtualization
    ii) Memory Virtualization
    iii) Desktop Virtualization

31. Explain in detail the pros and cons of the Remote Desktop Service.

(12 x 2 = 24)