24U548

B.C.A. DEGREE END SEMESTER EXAMINATION - OCTOBER 2024 SEMESTER 5 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY COURSE : 19U5VCBCA3 : PRINCIPLES OF VIRTUALIZATION

(For Regular 2022 Admission and Supplementary 2021/2020 / 2019/2018/2017/2016 Admissions)

Time : Three Hours

Max. Marks: 75

PART A Answer All (1 mark each)

- 1. List any four virtualization technologies.
- 2. Discuss the primary advantage of Hardware-Assisted Virtualization of the virtual machine?
- 3. What is the default URL used to access the RD Web Access Web page?
- 4. Define the term 'Capacity Planning'?
- 5. What are the different tools for managing remote application?
- 6. Which format is supported by Citrix Systems for XenServer?
- 7. Which function is used as the monitoring tool of XenDesktop?
- 8. What do you mean by Server consolidation?
- 9. What is the main aim of Server Virtualization?
- 10. How do you create a VHD file using the command line?

(1 x 10 = 10)

PART B Answer any 8 (2 marks each)

- 11. List the merits of Hardware Virtualization Technology in a virtualization environment.
- 12. What are the different approaches used by different organisation in implementing the server consolidation?
- 13. How many disk types are used in VMWare? Explain each disk type.
- 14. What are the methods to install vCenter Server?
- 15. Discuss the components of the remote desktop service.
- 16. Differentiate between horizontal and vertical scaling?
- 17. Discuss the steps of publishing an application to different users.
- 18. What is the use of PS2 controller in virtual network?
- 19. What is the cost(limitations) of virtualization?
- 20. What is Virtual Machine Configuration?

(2 x 8 = 16)

PART C Answer any 5 (5 marks each)

- 21. Differentiate between Block level storage virtualization and File level storage virtualization.
- 22. How can you add and configure Network Adapters for a Virtual Machine?
- 23. Illustrate how to install windows Virtual PC on a 32-bit platform?
- 24. Discuss on Remote Desktop Service.
- 25. How do you create a virtual machine?

- 26. What are the components of SharedApp VNC? Explain.
- 27. Explain the basic concepts and terminologies of a cloud?

(5 x 5 = 25)

PART D Answer any 2 (12 marks each)

- 28. Compare between VMWare and Microsoft Hyper-V?
- 29. State and explain the components of blade systems?
- 30. Explain in detail the pros and cons of the Remote Desktop Service.
- 31. Elaborate about the different ways to allocate virtual machine's system resources.

 $(12 \times 2 = 24)$