**POORNIMA UNIVERSITY, JAIPUR.**

**END SEMESTER EXAMINATION, April 2023**

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|  | **2BT4205** | Roll No. | Total Printed Pages: 2 |
| **2BT4205** |  |
| B. Tech. II Year IV-Semester (Main/Back) End Semester Examination, April 2023  **(CC)** | |
| **BCCCCE4104 : Principle of Virtualization** | | | |

# Max. Time: **3** Hours. Max. Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | Explain:  (i) Hypervisor (ii) Virtual machine | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | How do you install a hypervisor in Windows? | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.2** | **(a)** | What is a data center and how is it useful in Virtualization? | **(6)** | **Analyze** |
|  |  |  |  |  |
|  | **(b)** | Define the Virtualization concept with the help of the cloud? | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **UNIT-II (CO2)** |  |  |
|  |  |  |  |  |
| **Q.3** | **(a)** | Explain vSphere 6.0 with usability. | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | What do you understand by Shared Storage? | **(6)** | **Analyze** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.4** | **(a)** | How to create a network inside a hypervisor with the help of Virtual Switches? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Explain template management. | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **UNIT-III (CO3)** |  |  |
|  |  |  |  |  |
| **Q.5** | **(a)** | What steps can vSphere administrators take to ready their organizations for success with VMware Cloud on other Cloud service providers? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | How we can prove VMware is the leader in Virtualization and Cloud Computing technologies and provides solutions in network and desktop virtualization. VMware has changed the tech world from a physical to a software-based virtual world. | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.6** | **(a)** | You are the administrator of an organization. How do you find out whether your system has fault tolerance or not? | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | You are the administrator of a company. What input/output controls would you use for your company? | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **UNIT-IV (CO4)** |  |  |
|  |  |  |  |  |
| **Q.7** | **(a)** | **The clock time of an ESXi 6.x host is not correct. What should an administrator do to correct this issue?** | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | What Is host access and how does It work for an organization? | **(6)** | **Remember** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.8** | **(a)** | You are the administrator of a company. Which Scalability challenges do you think will be a challenge for your company's data? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | How to create and add a virtual machine inside VMware when the hard drive has not been added inside it while creating a virtual machine. | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **UNIT V (CO5)** |  |  |
|  |  |  |  |  |
| **Q.9** | **(a)** | What is the need of network optimization within virtualization? | **(6)** | **Apply** |
|  |  |  |  |  |
|  | **(b)** | How are virtual machines migrated within virtualization? | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.10** | **(a)** | Explain CPU optimization technique with an example. | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | Explain Flash Read Cache inside virtualization along with its utility. | **(6)** | **Apply** |