



## BRAINWARE UNIVERSITY

Course –MSc. (HN)

Virtualization (MHN301)

(Semester–3)

**Time allotted: 3 Hours**

**Full Marks: 70**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group –A

(Multiple Choice Type Question)

10 x 1 = 10

1. *Choose the correct alternative from the following*

(i) Vsphere is the product of \_\_\_\_\_?

- |              |           |
|--------------|-----------|
| a. Microsoft | b. Oracle |
| c. Novell    | d. Vmware |

(ii) Which are type 1 Hypervisors?

- |            |            |
|------------|------------|
| a. Vmotion | b. Hyper-v |
| c. Vsphere | d. ESXi    |

(iii) Which application is used to ESXi hosts centrally?

- |            |               |
|------------|---------------|
| a. Vcenter | b. Vclient    |
| c. Vmotion | d. HA cluster |

(iv) P2V stands for \_\_\_\_\_

- |                        |                         |
|------------------------|-------------------------|
| a. Physical-to-Vsphere | b. Physical-to-Virtual  |
| c. Physical-to-Volume  | d. Physical-to-Vertical |

(v) SCSI stands for

- |                                    |   |
|------------------------------------|---|
| a. Small Computer System Interface | b. Smart Calculator System Interface    |
| c. Swap Calculate System Interface | d. Symmetric Computing System Interface |

- (vi) In VMware HA stands for \_\_\_\_\_
- |                          |                      |
|--------------------------|----------------------|
| a. Hardware Availability | b. High Availability |
| c. Hardware Access       | d. Human Access      |
- (vii) To improve the security which feature has been added to ESXi?
- |               |               |
|---------------|---------------|
| a. Firewall   | b. Local Mode |
| c. Anti-Virus | d. vShield    |
- (viii) ESX stands for \_\_\_\_\_
- |                    |                            |
|--------------------|----------------------------|
| a. Elastic Sky X   | b. Elastic Sky Xtreme      |
| c. Extended Swap X | d. Expanded Space for Xeon |
- (ix) VMware VMFS stands for \_\_\_\_\_
- |                                |                              |
|--------------------------------|------------------------------|
| a. Virtual Mode File System    | b. Virtual Model Fat System  |
| c. Virtual Machine File System | d. Virtual Mode Fault System |
- (x) Which statement is true about bare metal hypervisor?
- |  |   |
|--|---|
| a. It can be hosted in existing operating system                             | b. it requires a separate license for the native operative system                             |
| c. It has minimum functionality to support only one type of operating system | d. It run directly on server hardware to provide virtual machines with time sharing resources |

### Group – B

(Short Answer Type Questions)  
(Answer any *three* from the following)

3 x 5 = 15

- |  |     |
|--|-----|
| 2. Explain Virtualization procedure.             | [5] |
| 3. What is VCenter?                              | [5] |
| 4. What is Cluster in VMware?                    | [5] |
| 5. Define Virtual Machine with suitable example. | [5] |
| 6. Define Type1 Hypervisors.                     | [5] |

**Group – C**

(Long Answer Type Questions)  
(Answer any *three* from the following)

3x 15= 45

7. (a) What are the differences between clone and snapshot? [5]  
(b) Describe storage in virtual machine. [5]  
(c) Explain the working principle of VMs in Virtualization procedure. [5]
8. (a) Explain the working procedure of Virtual Machine. [5]  
(b) What do you understand by virtual machine clone? [5]  
(c) Define VMware workstation. [5]
9. (a) Define Host-to Host adapters in Virtualization. [5]  
(b) Define Server virtualization. [3]  
(c) What is the minimum requirement for installing Type 2 Hypervisor? [7]
10. (a) Define Datacenter with suitable example. [4]  
(b) What is the difference between NAS and SAN storage? [6]  
(c) Define DAS in Virtualization. [5]
11. (a) Define Vmotion. [3]  
(b) Explain the functionalities of Open Filer in ESXi? [7]  
(c) What is Vsphere? [5]