Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2018**

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| **Code :** | **14CS2043** | **Duration :** | **3hrs** |
| **Sub. Name :** | **VIRTUALIZATION** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Outline the Anatomy of a Virtual Machine and advantage. | CO1 | 10 |
| b. | Compare and Contrast Type1 Hypervisor and Type2 Hypervisor. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Write the functionalities of the following:  i. Hardware Emulators.  ii. Application Virtual Machines.  iii. Mainframe Virtual Machine.  iv. Operating System Virtual Machines.  v. Parallel Virtual Machines. | CO1 | 10 |
| b. | Appraise the various parameters taken into consideration while selecting a motherboard. | CO1 | 10 |
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| 3. | a. | Elaborate the usage of Oracle Virtual Box. Write the steps to be followed to install Oracle Virtual Box and then a guest OS in it. How can the guest OS be accessed from the Windows Host Operating system? | CO2 | 12 |
| b. | Summarize the steps involved in copying and moving Virtual PC VMs to Other Hosts Guest Vms. | CO2 | 8 |
| (OR) | | | | |
| 4. | a. | Illustrate the use of memory ballooning, page sharing, and memory overcommit. How it contributes to the memory management of virtual machines. | CO2 | 12 |
| b. | Explain how CPUs are managed for a Virtual Machine. | CO1 | 8 |
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| 5. | a. | Elaborate the process of network virtualization. | CO2 | 10 |
| b. | Write the steps associated with performing FullBackups. Differential backup and incremental backup. | CO1 | 10 |
| (OR) | | | | |
| 6. | a. | Explain the implementation process of DFS. | CO2 | 10 |
| b. | Write the benefits associated with using Samba with Kerberos Authentication. | CO3 | 10 |
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| 7. |  | Design of Scalable Enterprise Networks for TECHNO Private company by creating three virtual machines using type1 Hypervisor and give access rights to the company to access the virtual machines in the remote. | CO3 | 20 |
| (OR) | | | | |
| 8. | a. | Summarize the function of storage area network Backup and Recovery Techniques. | CO3 | 10 |
| b. | Assess the functioning of fiber channel. | CO1 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Draw SNIA shared storage model and Explain. | CO3 | 10 |
| b. | Appraise the need of Virtual IS. | CO3 | 10 |