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



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **17CS2046** | **Duration :** | **3hrs** |
| **Sub. Name :** | **IT INFRASTRUCTURE AND MANAGEMENT** | **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. | Head Post office of Delhi is trying to expand the services to nearby villages in Coimbatore. They are having IBM server with main frame platform support. Delhi Head post office wants to implement the virtualization. During the implementation, what are the areas need to be concentrated? Discuss your implementation procedure. | CO1 | 10 |
| b. | Consider that a datacenter is required for a national research center. While designing the datacenter, what are the components need to be  considered for research center? Also explain the datacenter functional procedure. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | List out the part of storage building block. | CO1 | 10 |
| b. | List out the addressing types in internet protocol and explain with  example. | CO1 | 10 |
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| 3. | a. | Consider that, A Server provides services to more than 1500 users in software company. An internet service provider offering 512Mbps internet connection to the server. Discuss the interfaces required for the server to support the internal and remote users for the software company. | CO1 | 20 |
| (OR) | | | | |
| 4. | a. | National One bank is setting up an online server for customers.  Customers will access the server from mobile, laptops and PC’s.  Explain the steps to add firewall for the server. | CO2 | 10 |
|  | b. | Explain Distance vector protocol. | CO2 | 5 |
|  | c. | Elaborate the steps to carry out the error correction in main frame  computer. |  | 5 |
|  |  |  |  |  |
| 5. | a. | Consider the following scenario, A Server provides services to more than 1700 users in service based software company. An internet service provider offering 512Mbps internet connection to the server. Discuss the interfaces required for the server to support the internal and remote users for the software company. | CO2 | 20 |
| (OR) | | | | |
| 6. | a. | List out the parts of storage building block. | CO2 | 5 |
|  | b. | Grade the pros and cons of a Blade server. | CO2 | 5 |
|  | c. | Is Direct memeory access is required to improve the memory related operations? Discuss your answer. | CO2 | 10 |
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| 7. | a. | Goole service industry is holding 10000 online customes. This service industry (IT systems) wants to provide 100% availability for the online customes with data support. Is this 100% availability for online customers, is possible or not ? If your answer is yes or no, substantiate your answer with required examples. | CO3 | 20 |
| (OR) | | | | |
| 8. | a. | Central Bank of India wants to expands the online services to users around, all over the nation. Discuss your opinion about list of services, servers, datacenters, backup server and security options. | CO3 | 20 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Indian public service commission is having IBM Blade server for conducting the online examination purpose. Currently the server is not using the instruction pipelining. If possible, How to improve the server performance withthe help of pipelining? Explain your points with required examplesand diagram. | CO3 | 15 |
|  | b. | Draw the block diagram of Mainframe architecture and list out the major requirements | CO1 | 5 |