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



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

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| --- | --- | --- | --- |
| **Code :** | **17CA2025** | **Duration :** | **3hrs** |
| **Sub. Name :** | **NETWORK COMPONENTS AND TROUBLESHOOTING** | **Max. Marks :** | **100** |

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Explain OSI layer in detail with diagram. | CO2 | 20 |
| **(OR)** | | | | |
| 2. | a. | Summarize Straight through and cross over cable and give example how to use them. | CO3 | 10 |
| b. | Explain BUS topology and the need of MAC address. | CO2 | 10 |
|  |  |  |  |  |
| 3. |  | Discuss various network components in detail with diagram. | CO3 | 20 |
| **(OR)** | | | | |
| 4. | a. | Explain static routing with CLI commands. | CO2 | 15 |
| b. | Discuss the basic functions of RIPv1. | CO4 | 5 |
|  |  |  |  |  |
| 5. | a. | Differentiate IP address and MAC address. | CO3 | 5 |
| b. | Calculate the Subnet ID, first IP, last IP and broadcast IP for 20 host in 192.168.1.0. | CO2 | 10 |
| c. | List the states of OSPF. | CO1 | 5 |
| **(OR)** | | | | |
| 6. | a. | Differentiate EIGRP and OSPF. | CO5 | 10 |
| b. | Explain administrative distance with example. | CO2 | 10 |
|  |  |  |  |  |
| 7. | a. | Briefly discuss DHCP with scope and diagram. | CO2 | 15 |
| b. | Demonstrate the working of Trivial File Transfer Protocol. | CO1 | 5 |
| **(OR)** | | | | |
| 8. | a. | Write notes on Domain Name Server and state how does it work. | CO2 | 12 |
| b. | Differentiate iterative and recursive queries in DNS. | CO1 | 8 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Justify the need of network analysis. | CO5 | 5 |
| b. | With suitable example differenciate NAT and PAT protocols. | CO6 | 15 |