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



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

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| **Code :** | **17CA2055** | **Duration :** | **3hrs** |
| **Sub. Name :** | **OSI LAYERS AND SECURITY PROTOCOLS** | **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. | Explain the functions of data link layer and network layer. | CO6 | 8 |
| b. | Describe Presentation Layer and explain the responsibilities of the presentation layer. | CO1 | 8 |
| c. | Draw the Layered model and explain how infomation is carried from source to the destination. | CO1 | 4 |
| (OR) | | | | |
| 2. |  | Name the different types of network topologies and brief its advantages. | CO1 | 20 |
|  |  |  |  |  |
| 3. | a. | Analyse in detail the different message types used in Border Gateway Protocol. | CO2 | 10 |
| b. | Distinguish FTP from HTTP. | CO2 | 5 |
| c. | Write a short note on Routing Information Protocol. | CO2 | 5 |
| (OR) | | | | |
| 4. | a. | List the series of steps used in the Domain Name System to turn the human-readable web address into a machine-readable IP address. | CO2 | 5 |
| b. | Explain the basic Operations of LDAP. | CO2 | 5 |
| c. | Describe the three main versions of the framework and SNMP, and how they are similar and different. | CO2 | 10 |
|  |  |  |  |  |
| 5. | a. | Explain Stream Control Transmission Protocol (SCTP). | CO3 | 10 |
| b. | Describe the services that are provided to the Upper Layers with a neat diagram. | CO3 | 10 |
| (OR) | | | | |
| 6. |  | Explain the elements of Transport Protocols in detail. | CO3 | 20 |
|  |  |  |  |  |
| 7. | a. | Write a detailed note on IPv4. | CO4 | 7 |
| b. | Describe the three types of IPv6 address. | CO4 | 6 |
| c. | Explain IPsec goals and architecture with a neat diagram. | CO4 | 7 |
| (OR) | | | | |
| 8. | a. | Explain ICMP features in detail. | CO5 | 6 |
| b. | Sketch the position of IGMP in the Network Layer and explain the different types of messages with a neat diagram. | CO5 | 14 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Explain the difference between Internet, Intranet and Extranet. | CO6 | 5 |
| b. | Explain the use of encryption and decryption. | CO6 | 5 |
| c. | List the four protocols used in VPN and explain any two. | CO2 | 5 |
| d. | Write a short note on Address Resolution Protocol. | CO2 | 5 |