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

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

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| **Code :** | **17CA3003** | **Duration :** | **3hrs** |
| **Sub. Name :** | **FUNDAMENTALS OF NETWORK SECURITY** | **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. | Illustrate the TCP/IP networking model. | CO1 | 10 |
| b. | Summarize frames, packets and segments. | CO2 | 5 |
| c. | Describe Transport Layer protocols. | CO5 | 5 |
| (OR) | | | | |
| 2. | a. | Enumerate the three Classes of IP Addresses. | CO1 | 10 |
| b. | Explain the purpose of Subnet mask in IP Communications. | CO1 | 5 |
| c. | Outline Data link layer and its purpose in a LAN. | CO3 | 5 |
|  |  |  |  |
| 3. | a. | Describe Ethernet Frame Header with suitable drawings. | CO3 | 10 |
| b. | Illustrate Fiber Optic and Twisted pair cabling. | CO2 | 10 |
| (OR) | | | | |
| 4. | a. | Examine the difference between a hub and a switch. | CO3 | 10 |
| b. | List the networking industry standards. | CO5 | 10 |
|  |  |  |  |  |
| 5. |  | Illustrate Distance Vector and Link State Routing Protocols. | CO6 | 20 |
| (OR) | | | | |
| 6. | a. | Illustrate Dynamic Routing Protocol with example. | CO4 | 10 |
| b. | Enumerate Basic Router Configuration and modes. | CO4 | 10 |
|  |  |  |  |  |
| 7. | a. | Explain in detail the Transport Layer protocols. | CO5 | 10 |
| b. | Illustrate the need for Port numbers and describe five well known port numbers and the services associated with them. | CO6 | 10 |
| (OR) | | | | |
| 8. |  | Discuss in detail the File Transfer Protocol (FTP) and its purpose. | CO6 | 20 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Illustrate Authentication and Authorization. | CO5 | 10 |
| b. | Discuss Encryption and Hashing. | CO5 | 10 |