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

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

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| **Code :** | **16CA2012** | **Duration :** | **3hrs** |
| **Sub. Name :** | **NETWORK FUNDAMENTALS** | **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. | Name the various types of networks. | CO1 | 2 |
| b. | What are the types of network hardware? | CO1 | 3 |
| c. | Define WAN & MAN. | CO1 | 5 |
| d. | Write short notes on Twisted Pair Cable. | CO1 | 5 |
| e. | Explain Local Area Network. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | What is computer network? List the usage of it. | CO2 | 5 |
| b. | Define protocols in computer network. | CO2 | 3 |
| c. | Define flow control and WAN. | CO2 | 5 |
| d. | Sketch out the architecture of OSI reference model. | CO2 | 2 |
| e. | Explain transmission technology in computer network. | CO3 | 5 |
|  |  |  |  |  |
| 3. | a. | Data link layer is divided into \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_. | CO2 | 2 |
| b. | What are the methods used to break bit stream into discrete stream? | CO2 | 2 |
| c. | What is byte count? | CO2 | 2 |
| d. | What is flag byter? | CO3 | 2 |
| e. | Explain the services provided by datalink layer and network layer. | CO3 | 12 |
| (OR) | | | | |
| 4. | a. | What are the responsibilities of datalink layer? | CO3 | 2 |
| b. | What is the purpose of Network Interface Card? | CO4 | 3 |
| c. | Why the Ethernet is called as 1-persistent protocol? | CO3 | 5 |
| d. | Write about Ethernet? | CO3 | 5 |
| e. | Design the issue of Datalink layer. | CO3 | 5 |
|  |  |  |  |  |
| 5. | a. | Flow control is performed from \_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_. | CO4 | 2 |
| b. | Write the basic function of transport layer. | CO3 | 4 |
| c. | Define Connectionless Transport Layer. | CO3 | 3 |
| d. | What is Error control? | CO3 | 3 |
| e. | Explain the transport layer. | CO3 | 8 |
| (OR) | | | | |
| 6. | a. | Datagram Network is not required in \_\_\_\_\_\_\_\_\_\_ setup. | CO4 | 1 |
| b. | Draw the workflow diagram for stop and wait ARQ cost ack frame. | CO4 | 3 |
| c. | Define MAC layer. | CO5 | 2 |
| d. | What is flag byte? | CO4 | 4 |
| e. | Describe the following.   1. Go Back and ARQ. 2. Stop and Wait. | CO3 | 10 |
|  |  |  |  |  |
| 7. | a. | Why Ethernet is said to be one persistent control or protocol? | CO5 | 2 |
| b. | Name the four types of S Frame. | CO4 | 3 |
| c. | What is Bit Stuffing? | CO3 | 3 |
| d. | Mention the different kind of Ethernet network. | CO4 | 4 |
| e. | Explain the error control in DLL. | CO4 | 8 |
| (OR) | | | | |
| 8. | a. | What is buffer? | CO4 | 2 |
| b. | List the most common technology of BaseBand 802. | CO4 | 3 |
| c. | Design issues of network layers. | CO4 | 4 |
| d. | Define Bluetooth. | CO4 | 3 |
| e. | Explain store and forward packet switching. | CO4 | 8 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Define Bitstream. | CO5 | 2 |
| b. | Define HDLC. | CO5 | 2 |
| c. | Write the types of Frame Fields Content in HDLC. | CO4 | 3 |
| d. | Give the usage of I,S,U Frames. | CO5 | 3 |
| e. | Explain routing algorithm and its types. | CO5 | 4 |
| f. | Write a short note on routing information protocol. | CO5 | 6 |