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



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

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| **Code :** | **14EC2041** | **Duration :** | **3hrs** |
| **Sub. Name :** | **HIGH SPEED NETWORKS** | **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. | Compare frame relay protocol architecture with X.25 protocol. Also, describe frame relay architecture with neat frame formats. | CO1 | 15 |
| b. | Discuss the call control procedure in frame relay networks. | CO1 | 5 |
| **(OR)** | | | | |
| 2. |  | Explain ATM protocol architecture with its cell format. Identify the adaptation layer which supports all real time and non-real time services and give its frame format. | CO1 | 20 |
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| 3. | a. | Elaborate in detail the high speed gigabit LAN standards with an example. | CO2 | 10 |
| b. | Compare and contrast different types of Ethernet media. | CO2 | 10 |
| **(OR)** | | | | |
| 4. | a. | Explain IEEE 802.11 standard with reference to the basic architecture, protocol architecture and MAC frame format with neat sketches. | CO2 | 15 |
| b. | Compare and contrast CSMA/CD with CSMA/CA. | CO2 | 5 |
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| 5. | a. | Explain in detail the various congestion control techniques with necessary diagrams. | CO2 | 15 |
| b. | Explain the reason for moving from stop-and-wait flow control to sliding window flow control. | CO2 | 5 |
| **(OR)** | | | | |
| 6. | a. | Discuss various types of queuing system structures with neat sketches. | CO2 | 15 |
| b. | Discuss in detail the ABR traffic management. | CO1 | 5 |
|  |  |  |  |  |
| 7. | a. | Discuss the various techniques used to deal with the calculation of retransmission timer. | CO2 | 15 |
| b. | Illustrate the performance of TCP over UBR. | CO1 | 5 |
| **(OR)** | | | | |
| 8. | a. | Explain in detail the ABR capacity allocation. | CO1 | 5 |
| b. | Explain the methodologies of TCP timer management in detail. | CO2 | 15 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Explain about RSVP reservation styles and protocol mechanisms. | CO3 | 10 |
| b. | Illustrate the operation of multiprotocol label switching. | CO3 | 10 |