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

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

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| **Code :** | **16CA2005** | **Duration :** | **3hrs** |
| **Sub. Name :** | **PRINCIPLES OF DATA COMMUNICATION** | **Max. marks :** | **100** |

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Write a detailed note on pulse code modulation method with suitable example. | CO1 | 20 |
| (OR) | | | | |
| 2. |  | List and explain the different types of modulation through suitable diagrams. | CO1 | 20 |
|  |  |  |  |  |
| 3. | a. | Write a note on Discrete messages and Information Content. | CO1 | 10 |
| b. | Explain the Shannon’s Theorem on Channel Capacity. | CO2 | 10 |
| (OR) | | | | |
| 4. |  | Discuss the different types of communication that can take place in the presence and absence of noise. | CO1 | 20 |
|  |  |  |  |  |
| 5. |  | Elaborate the most significant transmission impairments in communication. | CO1 | 20 |
| (OR) | | | | |
| 6. |  | Discuss in detail the characteristics of various guided media transmissions. | CO1 | 20 |
|  |  |  |  |  |
| 7. |  | Elaborate in detail the concept of Digital Data and Digital signals through suitable examples. | CO1 | 20 |
| (OR) | | | | |
| 8. | a. | Discuss the key characteristics of the various categories and classes recognized in the current standard of UTP. | CO1 | 10 |
| b. | Briefly explain the transmission characteristics and benefits of optic fiber. | CO1 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Elaborate the different data transfer modes of High Level Data Link Control. | CO1 | 10 |
| b. | Write short notes on Frequency Division Multiplexing. | CO1 | 10 |