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

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

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| **Code :** | **15EI2011** | **Duration :** | **3hrs** |
| **Sub. Name :** | **TELEMEDICINE** | **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. | Categorize the benefits and limitations of Telemedicine. | CO1 | 10 |
| b. | Explain the layers of TCP/IP protocol in detail. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Explain the Layers of OSI Model with necessary diagrams. | CO1 | 12 |
| b. | Illustrate the functional diagram of telemedicine with the modes of communication. | CO1 | 8 |
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| 3. | a. | Explain the components of videoconferencing system and its application in Telemedicine. | CO2 | 10 |
| b. | Elaborate on the ethical and legal aspects of Telemedicine in terms of Confidentiality, Patient Rights and Consent. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Explain satellite communication and the different types of satellites with examples. | CO2 | 12 |
| b. | Elaborate on the working of D-AMPS with necessary diagrams. | CO2 | 8 |
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| 5. | a. | Describe cryptography and its types with the block diagram. | CO2 | 10 |
| b. | Discuss the modulation techniques to be followed for a digital signal. | CO2 | 10 |
| (OR) | | | | |
| 6. | a. | Describe the standards to be followed while using DICOM in Telemedicine. | CO3 | 10 |
| b. | Explain the concept of video phone based PSTN in detail. | CO2 | 10 |
|  |  |  |  |  |
| 7. | a. | Demonstrate the different concepts of error detection with suitable examples. | CO2 | 10 |
| b. | Discuss the types of antenna with its advantages, disadvantages and applications. | CO2 | 10 |
| (OR) | | | | |
| 8. | a. | Propose the standards to be followed while using HL7 in Telemedicine. | CO3 | 10 |
| b. | Explain the concept of data compression in medical field. | CO3 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. |  | Discuss the application of telemedicine in various fields of medicine. | CO3 | 20 |