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

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

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| **Code :** | **17MT2008** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DIGITAL TELEVISION ENGINEERNG** | **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. | Describe the process of analogue to digital video conversion. | CO2 | 10 |
| b. | Illustrate and explain the working of a DTV receiver. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Elaborate in detail on compression of digital signals. | CO3 | 10 |
| b. | Relate on the picture and sound quality in DTV signals. | CO3 | 10 |
|  |  |  |  |  |
| 3. | a. | Determine the various factors required for finding satellite. | CO2 | 10 |
| b. | Illustrate and explain in detail on the working of universal LNB. | CO2 | 10 |
| (OR) | | | | |
| 4. | a. | Demonstrate the signal flow of Satellite receiver with block diagram. | CO3 | 10 |
| b. | Classify on AM, FM modulation schemes in Satellite TV. | CO2 | 10 |
|  |  |  |  |  |
| 5. | a. | Justify on the role of headend as the heart of cable network. | CO2 | 10 |
| b. | Illustrate and explain on Coaxial Cable networks. | CO2 | 10 |
| (OR) | | | | |
| 6. | a. | Relate QPSK with 64 QAM in the perspective of data modulation. | CO2 | 10 |
| b. | Examine the influence of terrestrial signals in coaxial networks. | CO3 | 10 |
|  |  |  |  |  |
| 7. | a. | Appraise on the antennas used for terrestrial transmission. | CO3 | 10 |
| b. | Justify the use of in-house amplifier in a terrestrial receiver link. | CO2 | 10 |
| (OR) | | | | |
| 8. | a. | Describe COFDM modulation in terrestrial broadcast. | CO3 | 10 |
| b. | Discuss on the concept of single frequency network. | CO3 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Classify on the various types of STB available. | CO2 | 10 |
| b. | Describe in detail on the functional blocks in a STB. | CO3 | 10 |