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



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

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| **Code :** | **17MT2008** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DIGITAL TELEVISION ENGINEERING** | **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. | Explain the frame structure in SDTI protocol. | CO3 | 5 |
| b. | Differentiate between Composite and Component video signals. | CO1 | 15 |
| **(OR)** | | | | |
| 2. | a. | Discuss on the cause of standing waves. | CO1 | 5 |
| b. | Elaborate on the different television standards. | CO3 | 15 |
|  |  |  |  |  |
| 3. | a. | Explain the AERP affects on antenna performance. | CO1 | 5 |
| b. | Discuss the various parameters associated with an antenna. | CO2 | 15 |
| **(OR)** | | | | |
| 4. | a. | List out and explain any two transmission protocols. | CO3 | 5 |
| b. | Elaborate on the different types of antennas in DTV. | CO1 | 15 |
|  |  |  |  |  |
| 5. | a. | Appraise on different types of transmission mechanism of DTV. | CO1 | 5 |
| b. | Explain SDTI model for digital television in detail. | CO1 | 15 |
| **(OR)** | | | | |
| 6. | a. | Discuss any two classes of service in optical fiber networking. | CO1 | 5 |
| b. | Elaborate on the reference architecture of optical fiber communication. | CO3 | 15 |
|  |  |  |  |  |
| 7. | a. | Elucidate on fiber channel Transport technology with neat diagram. | CO1 | 5 |
| b. | Elaborate on COFDM modulation technique for DTV in detail. | CO1 | 15 |
| **(OR)** | | | | |
| 8. | a. | Identify any two audio and video compression standard in DTV. | CO3 | 5 |
| b. | Elaborate on the reference architecture of satellite DTV in detail. | CO1 | 15 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Discuss generic audio coding with relevant diagram. | CO1 | 5 |
| b. | Elaborate on the interactivity channel subsystem. | CO1 | 15 |