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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 2017**

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| **Code :** | **14MT2018** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DIGITAL TELEVISION AND VIDEO 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. | Highlight major parameters of a broadcast antenna. | CO1 | 5 |
| b. | Elaborate on various television standards available. | CO1 | 15 |
| (OR) | | | | |
| 2. | a. | What is Screen Reolution? Explain in detail about the various TV resolutions. | CO2 | 10 |
| b. | Compare and Contrast Composite and component video signals | CO2 | 10 |
| 3. | a. | Evaluate the working of camera with human eye. | CO1 | 10 |
|  | b. | Explain in detail about the reference architecture of DTV in detail. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Define the efficiency of an antenna? | CO2 | 5 |
|  | b. | Write in detail on SDTI for DTV. Draw relevant diagrams. | CO2 | 15 |
| 5. | a. | Identify major transport technologies in a digital TV system? | CO1 | 5 |
|  | b. | Explain in detail about the reference architechure of Fiber Channel protocol and frame format. | CO1 | 15 |
| (OR) | | | | |
| 6. | a. | Explain about different scanning mechanism in television? | CO1 | 5 |
|  | b. | Elaborate in detail on the reference model of terrestrial DTV system. Draw relevant diagrams. | CO1 | 15 |
| 7. | a. | Explain any two classes of service in optical fiber networking? | CO3 | 5 |
|  | b. | Explain in detail on various transmission technologies in DTV. | CO3 | 15 |
| (OR) | | | | |
| 8. | a. | What is meant by antenna gain? What are the parameters affecting gain? | CO2 | 5 |
|  | b. | Explain in detail on 8 VSB modulation techniques. | CO2 | 15 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Explain Generic audio coding with relevant diagram? | CO3 | 5 |
|  | b. | Explain in detail on the interactivity channel subsystem. | CO3 | 15 |

ALL THE BEST