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



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

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| **Code :** | **14CS2041** | **Duration :** | **3hrs** |
| **Sub. Name :** | **IP TV AND INTERNET VIDEO** | **Max. Marks :** | **100** |

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Describe the arguments in favour and against of IP Video. | CO1 | 20 |
| (OR) | | | | |
| 2. | a. | State the new rules published by TRAI in IP TV services and state the pros and cons of new rules. | CO1 | 16 |
| b. | Discuss the characteristics of IP TV. | CO2 | 4 |
|  |  |  |  |  |
| 3. | a. | Compare the IP unicasting with IP multicasting. | CO2 | 4 |
| b. | Discuss the key parts of IP Networks. | CO2 | 16 |
| (OR) | | | | |
| 4. | a. | Explain different applications where video servers are commonly used. | CO1 | 10 |
| b. | List the functions of video server. | CO1 | 10 |
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| 5. |  | Investigate the factors that are affecting video quality in IP TV and internet video. | CO2 | 20 |
| (OR) | | | | |
| 6. | a. | Why security is need in the IPTV? Explain the various security methods used in IPTV. | CO1 | 14 |
| b. | Write in detail, how will you improve security by using watermarking? | CO1 | 6 |
|  |  |  |  |  |
| 7. | a. | Describe the importance of the bandwidth in IP TV services. | CO3 | 14 |
| b. | Explain the calculation of the bandwidth for delivering Video services. | CO3 | 6 |
| (OR) | | | | |
| 8. | a. | Describe the key functionalities provided by the middleware. | CO3 | 10 |
| b. | Define content creation workflow and explain it with suitable diagram. | CO3 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Explain the basic functional element and features of STB. | CO3 | 20 |