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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

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

**Supplementary Examination – June – 2017**

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| **Code :** | **14CS3056** | **Duration :** | **3hrs** |
| **Sub. Name :** | **INTERNETWORKING MULTIMEDIA** | **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. | Discuss the multicast internet model with appropriate diagrams. | CO1 | 10 |
| b. | Explain the various internet service models with suitable diagrams. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Design and explain a network service model which is capable enough to create and maintain communication in multimedia scenario. | CO1 | 10 |
| b. | Consider a RSVP multicast session involving one sender and three receivers RCV1-RCV3. How does resource reservation protocol work for placing reservations? List various messages passed between the sender and receiver. | CO1 | 10 |
| 3. | a. | Discuss the multimedia addressing and routing with suitable diagrams. | CO1 | 10 |
|  | b. | Describe the role of flood and prune protocols in multicast routing and addressing with suitable diagrams. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Discuss the various properties of reliable multicast transport. | CO1 | 8 |
|  | b. | A multimedia company gets the contract of conducting a video conference in which the Prime Minister of our country addresses the students in some of the schools. The company wanted to use the Center Based Tree routing mechanisms to transmit the data from the source node to different destination nodes in different schools. Analyze the CBT, SM-PIM and BGMP routing mechanisms and propose an efficient routing mechanism for the company. | CO1 | 12 |
| 5. | a. | Discuss the various compression techniques used in multimedia data transmission. | CO1 | 15 |
|  | b. | Write short notes on the process of converting an analog signal into digital signal. | CO1 | 5 |
| (OR) | | | | |
| 6. | a. | An advertising company required to conduct a multisite conferencing among its manager in various locations. But the company is not having the established shared multiplexed network among its branches. Suggest and explain the various methods of achieving Multisite Conferencing in the absence of the shared multiplexed network. | CO1 | 5 |
|  | b. | Elaborate the H.261 encoding scheme with suitable block diagram. | CO1 | 15 |
| 7. | a. | Explain the use of ISDN to do IP access to Mbone. | CO2 | 15 |
|  | b. | Write short notes on Distributed Virtual Reality. | CO2 | 5 |
| (OR) | | | | |
| 8. | a. | Explain the Session Initiation Protocol relay and redirection mechanisms with necessary diagrams. | CO2 | 15 |
|  | b. | Differentiate MMCC and CCCP internet models | CO2 | 5 |
|  | | **Compulsory**: | CO2 |  |
| 9. | a. | Explain the public key cryptography used in multimedia data transmission. | CO3 | 10 |
|  | b. | Discuss the various key distribution mechanisms in detail. | CO3 | 10 |