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 – Nov/Dec – 2016**

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|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **14CS3066** | **Duration :** | **3hrs** |
| **Sub. Name :** | **IP Telephony** | **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 how the User terminal is able to send messages between the different eNodes and establish a session. | (CO1) | (20) |
| (OR) | | | | |
| 2. | a. | How is migration from fixed line to mobile and VoIP services predicted to continue in the future? | (CO1) | (10) |
| b. | Explain the enoromous success of peer–to-peer (P2P) voice applications. | (CO1) | (10) |
| 3. |  | Explain the NGN functional architecture as defined by the European Telecommunications Standard Institute (ETSI). | (CO1) | (20) |
| (OR) | | | | |
| 4. | a. | Explain in detail about the Session Initiation Protocol and its components | (CO1) | (10) |
|  | b. | How is legacy access and PSTN/ISDN interconnection supported by PES? | (CO2) | (5) |
|  | c. | How is the OSI Reference Model and the SS7 Protocol Stack related? | (CO2) | (5) |
| 5. | a. | Explain the concept of international roaming with the help of the diagram. | (CO2) | (10) |
|  | b. | Pictorially describe the IP Telephony administrative domain. | (CO2) | (10) |
| (OR) | | | | |
| 6. | a. | Explain the panorama of main VoIP service providers. | (CO2) | (10) |
|  | b. | How does the customer and end user communicate ?Explain their relationship as business actors. | (CO2) | (10) |
| 7. | a. | Explain how the service requirements are met for the IP Telephony interconnection. | (CO2) | (20) |
| (OR) | | | | |
| 8. | a. | What are the factors that should be considered in an interconnect agreement? | (CO3) | (5) |
|  | b. | Explain the working of Interconnection Node (IN). | (CO3) | (10) |
|  | c. | Pictorially represent the general view of common components of service layer of TISPAN NGN. | (CO3) | (5) |
|  | | **Compulsory:** |  |  |
| 9. | a. | Explain with an example the flow of message exchanges to port a number. | (CO3) | (20) |

ALL THE BEST