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 :** | **14CS2066** | **Duration :** | **3hrs** |
| **Sub. Name :** | **TCP/IP** | **Max. marks :** | **100** |

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Explain the functionalities of various layers in OSI Model. | CO1 | (20) |
|  |  | (OR) |  |  |
| 2. | a. | With neat sketch explain how to connect home computers to internet. | CO1 | (10) |
|  | b. | Explain the various wireless access Technologies. | CO3 | (10) |
|  |  |  |  |  |
| 3. | a. | With neat sketch explain the IPV6 Header. | CO2 | (10) |
|  | b. | Does IPV6 support Fragmentation? Justify your answer. | CO2 | (10) |
|  |  | (OR) |  |  |
| 4. | a. | State any two difference between IPV4 and IPV6? | CO2 | (4) |
|  | b. | Change the following IPv4 addresses from binary notation to dotted-decimal notation.  i) 10000001 00001011 00001011 11101111  ii) 11000001 10000011 00011011 11111111 | CO2 | (4) |
|  | c. | An organization is granted the block 201.12.3.0/24. The organization needs four subnetworks, with 100, 50 20 and 10 users. Design a suitable addressing table for each of these networks. | CO3 | (12) |
|  |  |  |  |  |
| 5 | a. | With neat sketch explain the operation of Address resolution Protocol | CO3 | (12) |
|  | b. | Compare and Contrast Static and Dynamic Rouiting. | CO3 | (8) |
|  |  | (OR) |  |  |
| 6 | a. | How do TCP handle out of order packets? | CO2 | (5) |
|  | b. | Explain how flow control is enforced in transport layer by TCP. | CO2 | (15) |
|  |  |  |  |  |
| 7 | a. | What are the various services provided by TCP? | CO2 | (10) |
|  | b. | With neat sketch explain the UDP Header Structure. | CO2 | (8) |
|  |  | (OR) |  |  |
| 8 | a. | How do a computer get its IP address when connected to the network? | CO3 | (8) |
|  | b. | What is the difference between Telnet and SSH? | CO3 | (5) |
|  | c. | What is meant by web Cache? Why it is required in the networks? | CO3 | (10) |
|  |  | **Compulsory:** |  |  |
| 9 | a. | A client need to stream video from a server on real time. List the various application layer protocol. Explain the communication sequence for the above application | CO1 | (20) |

ALL THE BEST