**INTERNAL ASSIGNMENT - 2**

**Course Code : -** 23OMC102 **Last Date of Submission: -**

**Course Title : -** COMPUTER NETWORKS

**Assignment No. : -** 2 **Maximum Marks:** 30

**Note:**

1. The assignment has two parts, A and B. Part A is of 10 MCQ-type Questions of 1 mark each.
2. Part B is of 20 Marks having 8 Descriptive Questions. Attempt any 5 out of them.

**Part-A (10 x 1 = 10 Marks)**

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| **Q.No.** | **Question** |
| 1 | The maximum number of ports available for use in the TCP protocol is   1. 64 2. 128 3. 256 4. 65535 |
| 2 | The sequence number is used in TCP for   1. Keeping track of the number of packets transmitted and received 2. Identifying the source and destination IP addresses 3. Identifying the source and destination port numbers 4. Ordering and reassembling the different segments of a message |
| 3 | The function of a router is   1. To change the data from one format to another 2. To detect errors in data 3. To send the packet to the uplinks 4. None of the above. |
| 4 | Which of the below options is not a network layer function?   1. Addressing 2. Congestion Control 3. Routing 4. Internetworking |
| 5 | The network with network layer connectionless service is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ network.   1. Datagram 2. Virtual Circuit 3. Both A and B 4. None of the above |
| 6 | \_\_\_\_\_\_ table is used by the router to find the next hop for a packet  A. Switching  B. ARP  C. NAT  D. Routing |
| 7 | The main goal of developing IPv6 is   1. To increase data transmission speed 2. To improve network security 3. To increase the number of available IP addresses 4. None of the above |
| 8 | Link Layer is responsible for   1. End-to-end delivery of data 2. Node-to-node delivery of data 3. Both A and B 4. Either A or B |
| 9 | Random access is also called, A. Polling  B. Reservation  C. Contention  D. None of the above |
| 10 | The process of converting the analog sample into discrete form is called,   1. Multiplexing 2. Modulation 3. Sampling 4. Quantization |

**Section B (20 marks)**

Attempt any five questions from Q1 to Q8. (5 x 4 = 20 Marks)

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| **Q.No.** | **Question** | **CO** |
| 1 | Describe round-trip-time and how is it estimated. | 4 |
| 2 | Explain the different types of forwarding methods. | 5 |
| 3 | Describe briefly the DHCP architecture. | 5 |
| 4 | Explain the role of Hop count in routing algorithms | 5 |
| 5 | List the benefits of Wireless LANs | 3 |
| 6. | Describe Cyclic Redundancy Check. | 4 |
| 7 | Define Bit rate and Baud rate. Compare them | 4 |
| 8 | Define Modulation. Explain its need in communication systems. | 4 |