

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

00000EC407121904 Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**

Seventh semester B.Tech examinations (S), September 2020



**Course Code: EC407**

**Course Name: COMPUTER COMMUNICATION**

Max. Marks: 100

Duration: 3 Hours

**PART A**

*Answer any two full questions, each carries 15 marks.*

- |  | Marks |
|--|-------|
| 1 a) Compare the different physical topologies.                    | (5)   |
| b) Explain TCP/IP protocol suite.                                  | (10)  |
| 2 a) Describe the functions of all the layers of OSI model.        | (7)   |
| b) Describe the persistent methods in CSMA.                        | (4)   |
| c) List out the functions of data link layer.                      | (4)   |
| 3 a) Explain the architecture of IEEE 802.11 with suitable diagram | (10)  |
| b) Explain the Checksum method of error detection.                 | (5)   |

**PART B**

*Answer any two full questions, each carries 15 marks.*

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|---|------|
| 4 a) Explain the different networking devices.                                      | (7)  |
| b) Draw the general format of ICMP messages. Explain error-reporting ICMP           | (8)  |
| 5 a) Define routing table. Differentiate static and dynamic routing table.          | (5)  |
| b) Explain Dijkstra's algorithm to find the shortest path, with a suitable example. | (10) |
| 6 a) Explain Network Address Translation.   | (7)  |
| b) Explain the Routing table modification in Distance Vector Routing.               | (8)  |

**PART C**

*Answer any two full questions, each carries 20 marks.*

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|--|------|
| 7 a) Explain the protocol used for network management.                     | (8)  |
| b) Describe WWW architecture.  | (8)  |
| c) Explain POP3.   | (4)  |
| 8 a) What is Intrusion Detection System? Explain the types of IDS.         | (10) |
| b) Explain the three-way handshaking connection establishment mechanism in | (7)  |
| c) List out the congestion control categories.                             | (3)  |
| 9 a) Explain AH protocol.  | (7)  |
| b) Describe the four SSL protocols.  | (8)  |
| c) List out the services provided by IPsec.                                | (5)  |

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