

**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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