

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SEVENTH SEMESTER B.TECH DEGREE EXAMINATION(R&S), MARCH 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

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|---|----|--|------|
| 1 | a) | With a suitable diagram explain the fundamentals of TCP/IP protocol Suite. | (8) |
| | b) | Explain about (a) Coaxial cable (b) Fibre optic cable. | (7) |
| 2 | a) | Explain the error detection using CRC. | (8) |
| | b) | Explain about the MAC sub layers defined by IEEE 802.11 | (7) |
| 3 | a) | Explain how collision is avoided in CSMA/CA. | (10) |
| | b) | Explain about star and bus topologies. | (5) |

PART B

Answer any two full questions, each carries 15 marks.

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|---|----|---|------|
| 4 | a) | Explain the functionalities of network layer and IP packet format. | (10) |
| | b) | Explain the forwarding of packet in network layer. | (5) |
| 5 | a) | Explain the formation of shortest path tree using Dijkstra's Algorithm. | (10) |
| | b) | Explain about classful and classless addressing. | (5) |
| 6 | a) | What is VLAN? Explain its configurations. | (7) |
| | b) | Explain how Link State Routing is implemented in OSPF protocol. | (8) |

PART C

Answer any two full questions, each carries 20 marks.

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|---|----|---|-----|
| 7 | a) | Explain about TCP segment format. | (8) |
| | b) | Explain how DMZ helps in network security. | (6) |
| | c) | Explain about SNMP. | (6) |
| 8 | a) | Discuss how IPSec secures network layer communication. | (8) |
| | b) | Explain the various intrusion detection systems. | (6) |
| | c) | Explain about (a) PGP (b) SSL | (6) |
| 9 | a) | Explain congestion control measures implemented in transport layer. | (8) |
| | b) | Explain the architecture of WWW. | (6) |
| | c) | Explain about SMTP. | (6) |