

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SEVENTH SEMESTER B.TECH DEGREE EXAMINATION(R&S), DECEMBER 2019

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 OSI model. | (10) |
| | b) | Explain about byte stuffing with example. | (5) |
| 2 | a) | Explain the frame format in HDLC protocol. | (8) |
| | b) | Explain about TCP/IP protocol suite. | (7) |
| 3 | a) | Explain about simplex, half duplex and full duplex communication. | (3) |
| | b) | Explain how collision is handled in CSMA/CD. | (8) |
| | c) | Compare circuit switching and packet switching. | (4) |

PART B

Answer any two full questions, each carries 15 marks.

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|---|----|---|-----|
| 4 | a) | Explain about ICMP. How is error reporting possible in ICMP. | (8) |
| | b) | Explain the forwarding of packet in network layer. | (7) |
| 5 | a) | Explain subnetting and super netting. How do the subnet mask and supernet mask differ from a default mask in classful addressing? | (8) |
| | b) | Explain Link State Routing using Dijkstras algorithm with an example. | (7) |
| 6 | a) | What is VLAN? Explain its configurations. | (8) |
| | b) | Explain Routing Information Protocol with an example. | (7) |

PART C

Answer any two full questions, each carries 20 marks.

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|---|----|--|------|
| 7 | a) | Explain about open loop and closed loop congestion control mechanisms. | (10) |
| | b) | Write note on (a) PGP (b) TLS | (6) |
| | c) | Explain about firewall and its types. | (4) |
| 8 | a) | With necessary diagram explain the features of UDP. | (8) |
| | b) | Explain the various intrusion detection systems. | (6) |
| | c) | Explain the TCP segment format. | (6) |

- 9 a) Explain any four common attacks in networks. (8)
- b) Explain how Telnet establishes connection to a remote system. (6)
- c) Explain about IPSec and its modes. (6)
