

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Eighth semester B.Tech degree examinations, September 2020

Course Code: EE468**Course Name: Computer Networks**

Max. Marks: 100

Duration: 3 Hours

PART A*Answer all questions, each carries 5 marks.*

Marks

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|---|---|-----|
| 1 | What are the uses of computer networks? | (5) |
| 2 | Differentiate between connection Oriented Service and Connectionless service.
Give examples on each. | (5) |
| 3 | What is optimality principle? Explain. | (5) |
| 4 | Differentiate between Ports and Sockets. | (5) |
| 5 | What is jitter in computer network? How is it controlled? | (5) |
| 6 | Draw and explain UDP segment format. | (5) |
| 7 | What is MIME format of email? | (5) |
| 8 | What are the main components of email? | (5) |

PART B*Answer any two full questions, each carries 10 marks.*

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| 9 | Explain the following Transmission technology with examples | (10) |
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I. Broadcast Network**II. Point-to-point network**

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| 10 | Explain in detail OSI and TCP/IP reference models in detail. | (10) |
| 11 | Draw and explain IEEE 802.3 & IEEE 802.11 frame format in detail. | (10) |

PART C*Answer any two full questions, each carries 10 marks.*

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| 12 | a) Illustrate how Datagram subnet is implemented. | (6) |
| | b) Differentiate between Port and Socket. | (4) |
| 13 | Explain Dijkstra shortest path routing algorithm with a proper example. | (10) |
| 14 | Illustrate connection is established and Connection release protocol of Transport Layer. | (10) |

PART D

Answer any two full questions, each carries 10 marks.

- 15 a) Draw and explain TCP segment format. (8)
b) Enlist the internet application which runs on TCP and UDP. (2)
- 16 Illustrate how **TCP** connection is established, data transfer and connection release procedure is done. (10)
- 17 Explain with proper example how DNS protocol works. (10)
