

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Winter Examinations 2023

Course: B. Tech. Branch : Computer Science & Engineering

Semester :VI

Subject Code & Name: Computer Network (BTCOC602)

Max Marks: 60

Date:

Duration: 3 Hr.

Instructions to the Students:

1. All Questions are Compulsory.
2. Draw neat diagram wherever necessary.
3. Figures to right indicates full marks
4. Assume suitable data wherever necessary and mention it clearly

(Level/CO) Marks

Q. 1 Solve Any Two of the following.

- | | | |
|--|--------------|-----------|
| A) Describe social issues with computer network? | (Understand) | 06 |
| B) Give comparison between OSI reference model and TCP/IP model? | (Understand) | 06 |
| C) Compare connectionless and connection oriented protocol? | (Understand) | 06 |

Q.2 Solve Any Two of the following.

- | | | |
|--|--------------|-----------|
| A) Discuss Wi-MAX (802.16) and Bluetooth (802.15.1) technology application in real life? | (Understand) | 06 |
| B) Compare token ring and FDDI with their frame format? | (Understand) | 06 |
| C) Describe in brief 802.11 architecture and protocol stack? | (Understand) | 06 |

Q. 3 Solve Any Two of the following.

- | | | |
|--|-----------|-----------|
| A) Illustrate byte count and bit stuffing framing method? | (Apply) | 06 |
| B) A (7,4) hamming code is received as 1110000. Determine the correct code when even parity is considered.? | (Apply) | 06 |
| C) Justify how CRC is a stronger kind of error-detecting code.
msg – 1 1 0 1 1 0 1 0 0 0 0 gen- 1 0 1 0 1 , Calculate CRC for the given data input? | (Analyze) | 06 |

Q.4 Solve Any Two of the following.

- | | | |
|---|--------------|-----------|
| A) Compare IPv4 and IPv6 address formats? | (Understand) | 06 |
| B) Describe the following congestion control mechanisms with suitable example.
1. Traffic Throttling 2. Load Shedding | (Understand) | 06 |
| C) Illustrate with example leaky bucket and token bucket algorithms for traffic shaping? | (Understand) | 06 |

Q. 5 Solve Any Two of the following.

- | | | |
|--|--------------|-----------|
| A) Describe five tuple DNS record with an example? | (Understand) | 06 |
| B) Compare SMTP and POP Protocols? | (Understand) | 06 |

- C) Illustrate the network security essentials Confidentiality, Authentication, Non repudiation and Integrity control for considering the E-commerce website?

(Apply)

06

***** End *****