



MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

Paper Code : MCAN-204 Networking

UPID : 002521

Time Allotted : 3 Hours

Full Marks :70

The Figures in the margin indicate full marks.

Candidate are required to give their answers in their own words as far as practicable

Group-A (Very Short Answer Type Question)

1. Answer any ten of the following :

[1 x 10 = 10]

- (I) What do you mean by resolver?
- (II) What are the three elements of network security?
- (III) What do you mean by physical addressing?
- (IV) How many layers in TCP/IP model?
- (V) What is IPv4?
- (VI) What do you understand by congestion control?
- (VII) Give an example of switched WAN.
- (VIII) What is the bit length of port address of TCP/IP?
- (IX) What is classful addressing?
- (X) What is traffic descriptor?
- (XI) What is IP?
- (XII) What do you mean by datagram?

Group-B (Short Answer Type Question)

Answer any three of the following :

[5 x 3 = 15]

2. Write the differences between half-duplex, full-duplex with examples. [5]
3. Write the differences between TCP/IP and OSI model. [5]
4. For n devices in a network, what is the number of cable links required for a ring, bus, and star topology? Why are protocol needed? [5]
5. Write the differences between : primary vs secondary server. [5]
6. What are the uses of PGP(Pretty good privacy)? [5]

Group-C (Long Answer Type Question)

Answer any three of the following :

[15 x 3 = 45]

7. What are the key elements of a protocol? Explain briefly. What are the two categories of data communication standards? [3+3+3+3]
8. Write short notes: ARP, ICMP, UDP. [5+5+5]
9. What are the differences between point-to-point and multi-point connection in data communication? What are the main three network criteria? What are the fundamental characteristics of data communication? [5+5+5]
10. What is implicit and explicit signaling? Write short notes: Weighted Fair Queuing, Priority Queuing, FIFO Queuing. [3+3+3+3]
11. Write RSA algorithm. [8+7]
In a RSA cryptosystem, a participant A uses two prime numbers $p = 13$ and $q = 17$ to generate his/her public and private keys. If the public key of A is 35, then what will be the the private key of A ?

*** END OF PAPER ***