



MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

Paper Code : BCAC502 Computer Networking

UPID : 500128

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 is the size of MAC Address?
- (II) _____ defines the variations in the packet delay.
- (III) UDP stands for_____.
- (IV) What is DNS?
- (V) What is Circuit switching?
- (VI) EBCDIC uses _____ bits for each character.
(a) Six (b) Seven (c) Eight (d) Two
- (VII) Header of a frame generally contains _____
(a) synchronization bytes (b) addresses (c) frame identifier (d) all of the mentioned
- (VIII) CSMA stands for
(a) carrier sense multiple access (b) collision sense multiple access (c) carrier sense multiuser access (d) collision sense multiuser access
- (IX) In virtual circuit network each packet contains _____.
- (X) Write one difference between UDP and TCP.
- (XI) Differentiate between HTTP and HTTPS.
- (XII) The digital signal service has _____ levels.
(a) Five (b) Seven (c) Six (d) Eight

Group-B (Short Answer Type Question)

Answer *any three* of the following :

[5 x 3 = 15]

2. What do you understand by data communication ? Explain various components of data communication. [5]
3. What is token ring and token bus? [5]
4. Differentiate between Circuit and Packet switching. What is message switching? [5]
5. What is class A in Classful IP Addressing? [5]
6. Write two difference between IPv4 and IPv6? What is NAT? What will be the Number of networks in class B IP Address? [5]

Group-C (Long Answer Type Question)

Answer *any three* of the following :

[15 x 3 = 45]

7. (a) What is meant by random access method? give example of random access protocols. [5]
(b) Write a short note on the Collision - free protocols. [5]
(c) How TDM differs from TDMA? [5]
8. (a) Difference between P2P and Client/Server Architecture. [5]
(b) What is Tree Topology? [2]
(c) Write advantages of Star, Tree and Ring Topology. [8]
9. (a) Difference between Router and Switch? [5]
(b) How does HTTPS help authenticate web servers? [7]
(c) Difference between HTTPS and HTTP? [3]
10. (a) What is meant by segmentation? [3]
(b) What is meant by Concatenation? [2]
(c) What is rate based design? [2]
(d) Define Gateway. [4]

- (e) List out the user related attributes. [2]
- (f) What are the networks related attributes? [2]
- 11. (a) What is WDM? [3]
- (b) Disadvantages and Advantages of WDM. [7]
- (c) Difference between TDM and FDM. [5]

*** END OF PAPER ***