

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL**

Paper Code : EC602/PCC-CS602/PCCCS602 Computer Networks

UPID : 006596

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) Remote login protocol is known as _____
- (II) What is meant by protocol in computer network?
- (III) Layer-2 Switch is also called _____
- (IV) Each IP packet must contain _____.
- (V) Token bucket algorithm is an advanced form of _____
- (VI) Mail transfer protocol is known as _____.
- (VII) IP address of Loop back address is _____.
- (VIII) What are the two categories of QoS attributes?
- (IX) Three main division of the domain name space are _____.
- (X) State the function of application Layer in brief.
- (XI) Receiving window of selective repeat ARQ is _____.
- (XII) Why IP Protocol is considered as unreliable?

Group-B (Short Answer Type Question)

Answer any three of the following :

[5 x 3 = 15]

2. Explain the functions of physical layer and Data link layer in brief. [5]
3. Compare between CSMA/CD and CSMA/CA [5]
4. Explain [5]
 - i. Repeater
 - ii. Router
 - iii. Gateway
5. How does firewall protect data? [5]
6. What is meant by bit stuffing and why it is used? [5]

Group-C (Long Answer Type Question)

Answer any three of the following :

[15 x 3 = 45]

7. (a) Discuss the working of Twisted pair cable [7]
(b) What is optical fiber? State the advantages of using optical fiber in computer network. [8]
8. (a) Write short notes on: (i) Protocol using selective repeat (ii) Stop and Wait protocol [8]
(b) Discuss about VRC with an example. [7]
9. (a) Explain token bucket algorithm [7]
(b) Draw the TCP header and explain its parts [8]
10. (a) Compare between static and dynamic routing. [8]
(b) Explain the concept of RIP. [7]
11. (a) Explain how FTP can be used to browse website? [7]
(b) Discuss about the Bluetooth architecture and protocols involved during Bluetooth enabled network. [8]

*** END OF PAPER ***