M.sc.IT Semester – III
Paper No – 9: Data Communication and Network
Paper Code: 3598

Time: 2:30 Hours   Marks: 70

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Q-1 Answer the following question   [14]
(A) Explain: internet as a WAN.
(B) What is Protocol? List various protocols and explain any one.

OR

Q-1 Answer the following question   [14]
(A) Write note on architecture of internet
(B) Write a note on use of Internet and its services.

Q-2 Answer the following question   [14]
(A) Differentiate HTTP and FTP.
(B) Write note on SMTP and MIME.

OR

Q-2 Answer the following question   [14]
(A) Write a note on DNS
(B) What is socket programming? Explain

Q-3 Answer the following question.   [14]
(A) Explain IP address in detail.
(B) Write a detail node on congestion.

OR

Q-3 Answer the following question.   [14]
(A) Explain method of TCP connection establishment and transmission method.
(B) Differentiate connectionless and connection oriented protocols.

Q-4 Answer the following question   [14]
(A) Explain Distance vector routing algorithm.
(B) Write a note on network service model

OR

Q-4 Answer the following question   [14]
(A) Write note on ARP.
(B) Explain Ethernet frame structure

Q-5 Answer the following question   [14]
(A) Explain Confidentiality, Integrity, Availability in computer security
(B) Write a note on different types of Firewall.

OR

Q-5 Answer the following question   [14]
(A) Write a note on role of router in of network security.
(B) Write note on network security services.