A-1726
B.Sc. (I.T.) (Sem. III) Examination
March / April – 2015
Computer Network

Time : 3 Hours] [Total Marks : 70
Instruction :

1 Answer the following questions: 14
(1) Define the term Topology. How many links are required
    in fully connected mesh topology with N nodes?
(2) What are the applications of Computer Network?
(3) Define bandwidth.
(4) What do you understand by Packet-filter firewall?
(5) What is parity bit?
(6) What is use of Repeater?
(7) What is Trust relationship?

2 Attempt any two: 14
(1) Discuss Mesh and Ring topologies in detail.
(2) Explain Hybrid Networks. Discuss advantages and
disadvantages of it.
(3) What is OSI model? Explain functions of each layer.

3 Attempt any two: 14
(1) Explain IEEE 802.3 standard in detail.
(2) Discuss any three Internet Middle-Layer Protocols.
(3) Write a note on Circuit switching and Message switching
techniques in detail.

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4 Attempt any two:
    (1) Explain CSMA with collision detection.
    (2) Differentiate Repeaters and Hubs.
    (3) Discuss Distance Vector Routing algorithm in detail.

5 Attempt any two:
    (1) Explain Multiplexing in detail.
    (2) How does network manager install and configure an adapter?
    (3) Write a note on Secure-Sockets Layer.