BCA (SEMESTER-IV) EXAMINATION ,APRIL 2015

COMPUTER NETWORKS

Duration: 2 Hours   Marks: 50

Instructions:

1. All questions are compulsory.

2. Figures to the right indicate Full Marks.

Q.I.A) Define the following terms: (5*1=5)

1. Congestion

2. Packet Switching

3. Mesh Topology

4. Full Duplex

5. Subnet

B) Answer the following in one /two sentences each.   (5*1=5)

1. What is the reason for using layered protocols?

2. Give one point of difference between Virtual Circuit and Datagram?

3. What are the ways to address the framing problem?

4. List the different encoding techniques?

5. What are the responsibilities of session layer?

Q.II) Answer the following.

1. Give examples of well Known Ports.   (2)

2. Describe TCP Connection Management.   (3)

3. Draw the OSI reference model and briefly explain the functionalities of Physical layer.

                                                              (5)

Q.III) Answer the following.

1. Define the Hamming Distance between two words of the same size. (2)

2. Explain the frame format for HDLC Protocol. (3)

3. Explain the working of One Bit Sliding Window Protocol. (5)

Q.IV) Answer the following.

1. Explain Strict source routing and Loose Source Routing (2)

2. Explain class B and C IP Address. (3)

3. Illustrate with an example Shortest Path Routing Algorithm. (5)

Q.V) Answer the following.

1. Explain UDP Header. (2)

2. Explain SMTP protocol. (3)

3. Write a short note on Domain Name System. (5)