Chap1 - HW2 (C1)

학번: 21600108   이름: 김영빈

1. The following sentence is describing a terminology. Write down which term is explained. (FDM, TDM, WDM, multiplexing, line coding, modulation, virus, worm, UTP, STP, Fiber, packet, segment, frame, datagram)

   (a) A technique of varying a waveform with information for transmission on a physical channel. **(FDM)**

   (b) A malware that can infect a device without any explicit user interaction. (worm)

   (c) The time slots of a link are divided among the connections established across the link. (TDM)

   (d) A physical medium that is commonly used for computer networks within a building. (UTP)

   (e) A name of L4's PDU. (segment)

2. The followings are describing the feature of switching technology (technologies). Write down which switching technology (technologies) is (are) described. (circuit switching (CS), datagram, virtual circuit switching(VC))

   (a) The resources need to be reserved during the setup phase; the resources remain dedicated for the entire duration of data transfer phase until the teardown phase. (CS)

   (b) A connection set-up procedure is required. (CS, VC)

   (c) Stateful switches are used. (CS, VC)

   (d) Statistical multiplexing technique is used. (datagram, VC)

   (e) QoS (delay and BW) is supported. (CS).

   (f) Packets (or information) may arrive out of order. (CS)

3. The following is a description of a layer among OSI 7 layers. Write down which layer is described.

   (a) Process to process packet delivery. (network)

   (b) Node to the next node packet delivery (physical)

   (c) Dialog control and synchronization (session)

4. There are several factors that affect the packet delivery time. Writ down what factors affect the following delay. (transmission rate, packet (information) length, distance, packet arrival rate, queue size)

    (a) Propagation delay: distance

    (b) Transmission time: transmission rate, packet length

    (c) Queueing delay: queue size, packet arrival rate

5. The types of service primitives used in the sender side for the inter-layer communication are as follows: (request) and (confirm).

6. The PDU is an acronym of **Protocol Data Unit,**

7. The UDP is an acronym of **User Datagram Protocol,**

8. The UTP is an acronym of **Unshielded Twisted Pair,**

9. The IP is an acronym of **Internet Protocol,**