Name	Mahi Zakir	Marks Obtained	
Student ID (Sec.)	16101107 (01)	Full Marks	15

14.5

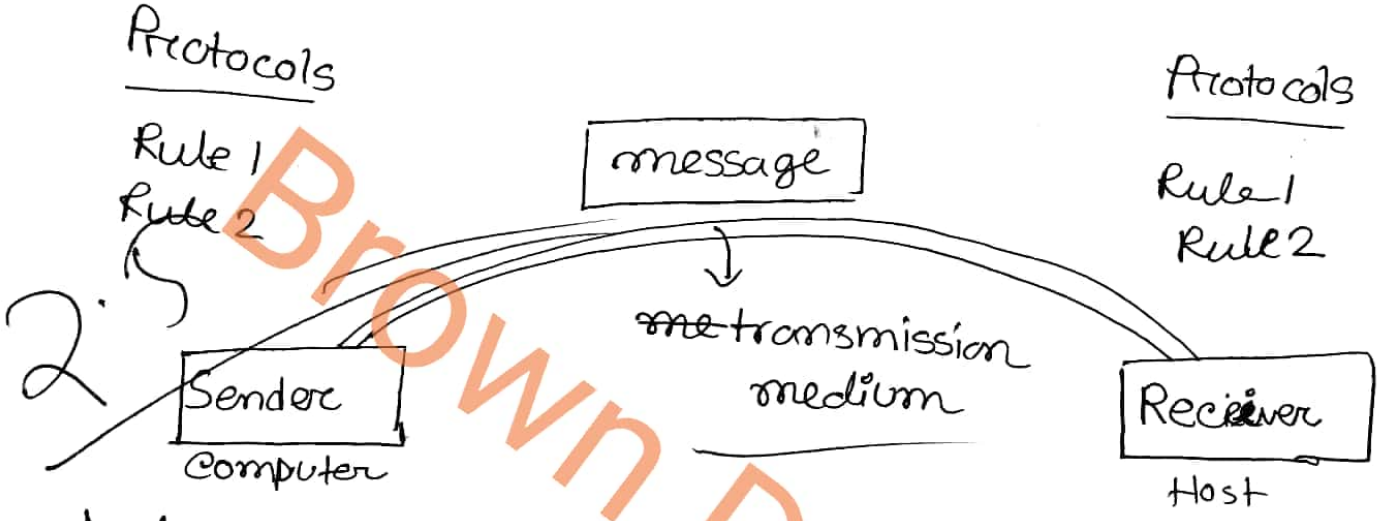
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CLASS TEST 01(SET-B): Fall 2017

CSE320/EEE361: Data Communications
Total Marks: 15 Times Allowed: 30 Minutes

- Answer ALL **Three (3)** questions.
- Figure in bracket [] next to each question indicates marks for that question.

Question No. 1

a) Explain the basic elements of a data communication system with a suitable diagram. [3 marks]



Data communication is the transfer of data in the form of 0's and 1's from a sender element to a receiver element through a transmission medium, eg, wire, and governed by protocols.

b) A television broadcast is an example of A transmission. [1 mark]

(A) simplex B) half-duplex C) full-duplex D) automatic.

c) The C address identifies a process on a host. [1 mark]

A) Physical B) IP (C) Port (D) Specific

Tanvir Mahtab
Sec-01
Full Marks

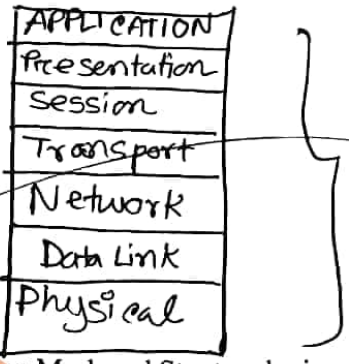
10/5/2017

Question No. 2

a) What do you mean by laying in data communication? Draw a block diagram that shows all layers of an OSI model. [2.5 marks]

Layering means dividing the whole process of data transmission in to different layers. So that it is easy to access ~~them~~ and work with them.

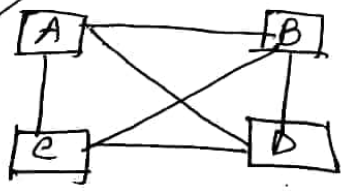
2.5



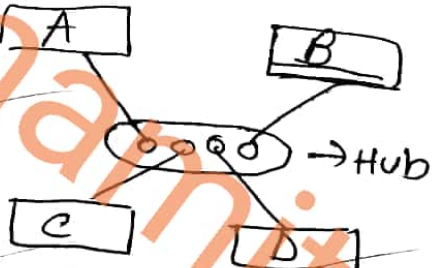
b) Differentiate between Mesh and Star topologies. [1.5 mark]

Every element must be connected to each other in mesh topology, whereas, star topology consists of a central ~~"HUB"~~ "hub" to which all the other elements are connected.

1.5



mesh topology



Star topology

c) What does ASCII stand for? How many alphanumeric can be represented by using Unicode? [1 mark]

ASCII = American Standardized Code for Information Interchange.

1

Number of alpha numerics that can be represented by Unicode = 2^{16}

Mohemma
161

Question No. 3

a) Define Logical Address and Physical Address? [2 marks]

Logical Address is the IP address of a network. It is used to identify the ~~dest~~ destination from the source. It is used in hop to hop delivary.

Physical Address is the final address of the process and is used in the Network ~~or~~ Access Layer. Eg: ~~Ma~~ MAC address ~~formed~~ formed in the data link layer.

2

b) Identify appropriate layers from the following functions of an OSI model. [2 marks]

	Functions	Layer
i.	Adding MAC address	Data Link
ii.	Compassion of a large size video file	Presentation
iii.	Selection of a shortest path for routing a message	Network
iv.	Making interface between user and the network	Application

2

c) What is internet? [1 mark]

Internet is an interconnected mesh of networks (eg WAN) where data can flow.

1

1

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THE END