ITS 323 – Quiz 1 (IT)

First name: _____   Last name: _____

ID: _____   Total Marks: _____

Email Address: _____@hotmail/gmail/other (that you used on Maillist)

Question 1 [1 mark]

Draw the Internet layered model, labelling the name of each layer.

Question 2 [1 marks]

Which following three acronyms refer to organisations that create telecommunications and Internet standards (circle the correct letter – only one answer)?

   a) ANSI, IEEE and OSI

   b) ANSI, IEEE and ISO

   c) IETF, ISO and IP

   d) IEEE, OSI and IETF

   e) OSI, IEEE and ANSI

Question 3 [3 marks]

A computer received packets at the following time:

Packet Number	Time sent [ms]	Time received [ms]
1	0	3
2	4	8
3	5	9
4	7	11
5	14	19

   a) What is the average packet delay at the receiver?

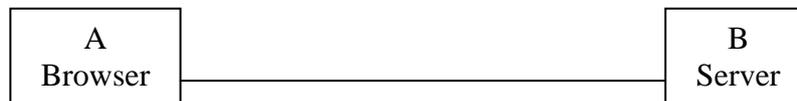   b) What is the jitter at the receiver?

Question 4 [2 marks]

Circle the type of address that the following examples correspond to in the Internet layered model.

Example:		Address Type:			
a)	www.siit.tu.ac.th	Physical	Logical	Port	Application
b)	steve@hotmail.com	Physical	Logical	Port	Application
c)	192.16.36.12	Physical	Logical	Port	Application
d)	00:18:40:E3:E3:B3	Physical	Logical	Port	Application

Question 5 [3 marks]

Consider a web browser application on Computer A communicating with a web server application on Computer B. The user at Computer A clicks on a link in the web browser, as a result a 100 byte request is sent to the web server, and the web server responds with a 1,000 byte web page.

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 ┌──────────┐                                    ┌──────────┐
 │    A     │                                    │    B     │
 │ Browser  │────────────────────────────────────│  Server  │
 └──────────┘                                    └──────────┘
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Assume:

- Processing delay at Computer A = 0ms
- Processing delay at Computer B = 2ms
- Queuing delay is 0
- Propagation delay from A to B = 25ms (and same from B to A)
- Transmission delay for 100 byte request is 1ms

Starting from when they click the link, how long does the user at Computer A wait for the response?