


Course No: ITGD4103
 Course Title: Data
 Communications and Networks
 Date: 02 / 01/ 2012
 No. of Questions: 4
 Time: 2 hours
 Using Calculator (yes)

University of Palestine

 Final Exam
 First Semester
 2011/2012
 Total Grade: 100

Instructor Name: Dr. Anwar
 Mousa
 Student No.: _____
 Student Name: _____
 College Name: Faculty of
 Information Technology
 Dep. / Specialist: _____
 Using Dictionary (No)

• *Answer all Questions*

First Question		No. of Branches (2)	(30/100)
Q1 B1			(20/30)
<p>Illustrate the difference between <u>attenuation distortion</u> and <u>delay distortion</u> as two kinds of impairments for guided media.</p> <p>Explain the causes for:</p> <ol style="list-style-type: none"> thermal noise impulse noise 			
Q1 B2			(10/30)
<p>Illustrate the benefits and disadvantages of using Fibre Optic in communications</p>			
Second Question		No. of Branches (1)	(20/100)
<p>a. When a frame relay network detects an error in a frame, what does the network do?</p>			
<p>b. Frame relay operates at speeds 20 times greater than X.25. Why?</p>			
Third Question		No. of Branches (2)	(30/100)
Q3 B1			(10/30)
<p>Explain the motivation for the use of small data cells of 53 bytes in ATM network.</p>			
Q3 B2			(20/30)
<p>a. It is inaccurate to think of SDH/SONET as communications protocols, but rather as generic and all-purpose transport containers. Explain why.</p>			
<p>b. State the function of the SONET Add-Drop Multiplexer (ADM).</p>			
Fourth Question		No. of Branches (1)	(20/100)
Q4 B1			()
<p>What is the total delay (latency) for a message of size 25Mbits which is sent on a link with length of 5000Km? The speed of electromagnetic wave inside the link is 2.5×10^8 m/s and the data transmission rate is 5Mbps.</p>			
		End of Questions	