

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

GX 1513

Semester II Examinations, 2003/2004

Exam Code(s)	<u>2BA1</u>
Exam(s)	<u>Second year BA (Information Technology)</u>
Module Code(s)	<u>CT245</u>
Module(s)	<u>Technological Frameworks II</u>
Paper No.	
Repeat Paper	<u>Special Paper</u>
External Examiner(s)	<u>Professor D.Bell</u>
Internal Examiner(s)	<u>Professor G. Lyons</u>
	<u>Ms. P. Byrne</u>

Instructions: Answer question 1 and any two others.

Duration 2 hrs

No. of Answer Books

Requirements:

Handout

MCQ

Statistical Tables

Graph Paper

Log Graph Paper

Other Material

No. of Pages 2

Department(s) Information Technology

1. (a) . Explain the following terms when used in telecommunications:
asynchronous ; CSMA/CD ; bandwidth ; packet switching; PAM [25]
(b) Describe the main methods used for signal modulation in order to
enable the analogue transmission of digital data. [15]
2. Errors inevitably occur in the transmission of telecommunications
systems. Outline some of the causes of these errors, and describe
techniques used for their detection, correction and prevention. [30]
3. (a) Explain the role of a file server and the functions it might carry out in
the management of a local area network. [10]
(b) List and explain the factors might you wish to consider in the
installation of a LAN in an old building with a variety of hardware
and software already in use. [20]
4. Describe the key technologies which you believed have enabled the
development and widespread use of the internet. [30]
5. (a) Outline some of the problems facing the developer of multimedia
material. [10]
(b) Write brief notes on one aspect of the social implications of digital
telecommunications which you have researched. [20]