FINAL EXAM – PART 2

I N S T R U C T I O N S

Basis Information

COURSE:	MA3457/CS4033
WHAT:	Final Exam, MATLAB Component
WHEN:	Monday, March 1, 2004; about 1 hour during the period from 7 to 9 pm
WHERE:	Computer lab, SH306
OPERATION SYSTEM:	UNIX
SOFTWARE:	MATLAB 6
REQUIRED FUNCTIONS:	All functions in your Library of MATLAB Procedures composed or collected during the course

FAQ

Q. *How will I get an access to my m-files being in the computer lab?*

A. Prior to the exam, they should be placed in a particular directory in your UNIX account. Being in the lab, once logged in, go to that directory and start MATLAB there – the files will automatically appear in the Current Directory window.

Q. *Will I need to create new MATLAB functions during the exam?*

A. There will be no tasks asking *to compose a script* implementing a particular algorithm; rather, the questions will be about applications of the scripts which are (supposed to be) ready for using and well familiar to you. However, to fulfill the assignments, in the course of the exam you may need to add 1-2 line(s) to your scripts, e.g., introducing a variable representing an analytical solution, drawing more than one curve of the same graph, etc.

Q. *What type of problems will be offered?*

A. The MATLAB Part of the Final Exam will be comprehensive, i.e., each major topic of the course will be covered. You will be asked to solve problems with application of the MATLAB functions from your Library. Contents-wise, the problems will be similar to the ones in the Mini-Projects (e.g., Project 1, Part 1, No 1 or Project 4, Part 1, No 2) or in your home computer exercises (like [C11], [C15], [C22], [C26], [C29], [C33], [C37], etc.).

Q. *How the results of the MATLAB solutions are supposed to be presented?*

A. You'll get problem statements on paper, but you won't be asked to *write/draw* anything there by hand; it will be necessary to use a computer and compose a short concise report on the results of your computations and include the required MATLAB outputs in this report. For this purpose, you could use `emacs` as a text editor and `xv` as a graphical editor. Numerical data (vectors, matrices, tables, etc.) could be copied in MATLAB and pasted to `emacs`. MATLAB graphical output could be exported as `*.jpg` or `*.gif` files and then processed/edited (if necessary) in `xv`.

Q. *What are the technical options for printing the report?*

A. MATLAB scripts (m-files), text files made in `emacs`, and graphics (in `jpg`, `gif` and other formats) generated by `xmax` could be printed from UNIX command line by

- `lpr Pmath104 -h <filename>`

MATLAB graphic files are easily printable from the MATLAB Figure's menu – by clicking File/Print and picking up `math104` printer. You may wish to put all graphs in the attachment to the report – on separate pages; just don't forget to identify each figure (for example, using Insert Text option in MATLAB Figure's menu) and provide clear references to the items in the attachment in the text of the report.

Q. *Is it possible to check how everything works in the computer lab?*

A. Yes. It would be feasible to come there for a few minutes in advance to familiarize yourself in the lab environment. The lab is open all the day; when Stratton Hall is not locked (nearly 7 am to 10 pm), SH306 is accessible. Stop by any time when the room is not occupied for regular classes. (Usually, there are no classes at all on Friday and Monday.)