# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF APPLIED SCIENCE

## COMPUTER SCIENCE DEPARTMENT JUNE EXAMINATIONS 2004

SUBJECT: INTERNET AND WEB DESIGNING SCS2204

#### INSTRUCTION TO CANDIDATES

Answer any five questions.

Time: 3 hours

#### **QUESTION ONE**

- a) Give brief descriptions of the following
  - i) Cyberspace
  - ii) Snail mail
  - iii) Browser.

[6]

b) Explain the seven layers of the ISO protocols.

[14]

#### **QUESTION TWO**

- a) Give brief descriptions of the following:
  - i) Telnet
  - ii) FTP
  - iii) Gopher
  - iv) Bandwidth

[8]

- b) Compare and contrast Java and Java script indicating their use in web page development. [6]
- c) Give basic specifications for an Internet server. You must describe briefly the services that can be offered by the server. [6]

#### **QUESTION THREE**

a) Give brief descriptions of ten generic Internet domains.

[5]

b) Give the possible URL offering ftp down loads for a file called Linux.zip in a directory called O.syst, which is a subdirectory of intrsc, which is a subdirectory of pubs.

The original serve is at Gomo University in the department of Computer Science (csc) in a server called Marula. Gomo University is in the education domain (edu) in the country domain of Ghana.

Assume that there is a mirror server called JAMBO with the same file at the University of Nairobi (UNIROBI) department of Systems Engineering (systeng) and that Gomo University is unreachable.

Give a brief explanation stating how you arrived at the URL. [At least  $1\frac{1}{2}$  pages]. [15]

P.T.O. FOR QUESTION 4,5 &6

### **QUESTION FOUR**

Write the HTML code to produce this form for online banking.

| Sign up for your online banking  |
|--|
| Banking ID:  |
| Password:  Must be six characters or more  |
| Re-type Password:  |
| If you forget your password or need help with your account, you will need to confirm the following information |
| Security Question Select a question to answer]   |
| Your answer  |
| Birthday Select one (MONTH DD, YYYY)   |
| Current bank  ACCOUNT NOTICES WILL BE SENT TO THIS BANK ADDRESS, INCLUDING NEW PASSWORD REQUESTS               |
| First Name Last Name   |
| Language & Content English - United States   |
| ZIP/Postal Code Gender   |
| Industry Select Industry   |
| Title Select a title]  |
| Specialization Select a specialization   |
| [20]   |
|  |
|  |

#### **QUESTION FIVE**

Write the HTML code to produce the following table:

| Keystrokes | Action                                 | Similar to UNIX command |
|------------|--|-------------------------|
| r          | Rename file                            | mv                      |
| e          | Edit file                              | emacs                   |
| C          | Copy file                              | ср                      |
| d          | Mark for deletion                      | rm                      |
| -          | Mark files ending with – for deletion  | rm*                     |
| #          | Mark all auto- save files for deletion | rm#*#                   |
|            | Mark all "extra' backs for deletion.7  | (none)                  |
| u          | Undelete                               | (none)                  |
| X          | Delete files that are marked           | rm and rmdir            |
| v          | View files                             | more                    |
| SPACE      | Move forward by filename               | (none)                  |
| DEL .      | Move backward by filename              | (none)                  |
| M          | Change file permissions                | chmod                   |
| n          | Move forward by filename               | (none)                  |
| D          | Move backward by filename              | (none)                  |
|            | 11070 500111515 7                      | [20]                    |

#### **QUESTION SIX**

You have just been appointed Senior Systems Engineer for Bathali University. The University has 10500 staff and students. The users need the following services: *Access to web servers, Full Internet, Engineer data interchange*. Design an Internet system for this University. You should include the following terms:

- VPI
- Intranet
- Firewall
- . T1
- T3
- Fibre link
- VSAT
- Low orbit
- Router

**N.B.** You must illustrate your answer with diagrams.

[20]



GOOD LUCK!