NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF APPLIED SCIENCE
COMPUTER SCIENCE DEPARTMENT
MAY EXAMINATIONS 2005

SUBJECT: INTERNET AND WEB DESIGNING
CODE: SCS2204

INSTRUCTION TO CANDIDATES

Answer any five questions. Paper contains Six questions.

Time: 3 hours

QUESTION ONE

a) What do the following terms mean with regards to mail servers?
    i.   Reverse path   [2]
    ii. Forward path   [2]
    iii. Verifying and expanding   [2]
b) The actual process of sending a mail message comprises three parts.
    Describe these parts   [6]

c) DHCP uses a four phase process to configure a DHCP client. State and
    describe these phases.   [8]

QUESTION TWO

a) What are RFCs?   [2]
b) After reviews RFCs are assigned a classification. State and describe these
    classifications   [10]
c) Describe the 3 maturity levels of internet standards   [6]
d) What is the IAB Official Protocol Standard?   [2]

QUESTION THREE

a) When more bits are used for the subnet mask, more subnets are
    available, but fewer hosts are available per subnet.
    In a class B network, how many subnets and hosts per subnet would be
    available if
    i.   3 bits are used for the subnet mask?   [2]
    ii. 8 bits are used for the subnet mask?   [2]

b)   During resolution, what occurs first, IP address resolution or host name resolution? Why is this order necessary?   [2]

c)   Explain the following terms with regards to DNS
 i.   resolver   [2]
 ii.   root level domain   [2]
 iii.   top level domain   [2]
 iv.   fully qualified domain name   [2]
 v.   zone of authority   [2]
 vi.   zone transfer   [2]
 vii.   master name server   [2]

QUESTION FOUR

a)   Once you've finished creating a new Web site what should be done to prepare it for publication   [10]

b)   Explain what the following code does   [10]

```
<html>

<head>

    <title>JavaScript</title>

<script language="JavaScript">

<!--

var browser = navigator.appName ;

if (browser == "Microsoft Internet Explorer")

    {

    document.write("<body bgcolor = '#b0ffff'>") ;

    }

else

    {

    document.write("<body bgcolor = '#ffcab0'>")

    }

// -->
```

```
        </script>
        </head>
        <div align="center">
        <br /><br />
        WELCOME
        <a href="http://www.birthdayusa.com "
            onMouseOver = "party.src = 'firecracker.gif' ; return true"
            onMouseOut = "party.src = 'balloons.gif' ;  return true">
        <img src = "balloons.gif" name = "party" border="0" /></a>
        </div>
        </body>
        </html>
```

QUESTION FIVE

a)   Explain the following terms
  i.   Cookie   [2]
  ii.   Media streaming   [2]
  iii. Applet   [2]

b)   Describe 4 ways to add sound to your web page [8]
c)   Describe the following types of video files
  i.   AVI (Audio Visual Interleave)   [2]
  ii.   MPEG (Motion Picture Experts Group)   [2]
  iii. Quick Time   [2]

QUESTION SIX

a)   Explain the following terms in relation to XML

    i.   Meta language   [2]

    ii.   Document Type Definition   [2]

    iii.   Well formed document   [2]

    iv.   Child elements   [2]

    v.   Processing instructions   [2]

    vi.   Cdata section   [2]

    vii.   Valid document   [2]

    viii.   Parser   [2]

b)   What are the following attributes of the form tag used for?

    i.   Action   [2]

    ii.   Method   [2]

END OF QUESTION PAPER

GOOD LUCK!