



**NCC EDUCATION**

**INTERNATIONAL DIPLOMA  
IN  
COMPUTER STUDIES**

**NETWORKING**

**JUNE 2009 – LOCAL EXAMINATION**

**SECTION A**

**Answer all questions in this section.**

**SECTION B**

**Answer any two questions in this section.**

**Time: 2 hours**

**Clearly cross out surplus answers.**

**Failure to do this in Section B will result in only the first two answers being marked.**

**Any reference material brought into the examination room must be handed to the invigilator before the start of the examination.**

<b>SECTION A</b>
<b>ANSWER ALL QUESTIONS IN THIS SECTION</b>

**QUESTION 1**

Briefly explain what a *WPAN* is.

**Marks****4****QUESTION 2**

Describe what a *terminator* is and describe its function in a networked environment.

**4****QUESTION 3**

Briefly describe the following terms:

a) Narrowband Radio LAN

**2**

b) Reflective Wireless Network

**2****QUESTION 4**

List the TWO (2) main methods of spread-spectrum communication and briefly describe them.

**4****QUESTION 5**

Briefly describe the following channel access methods:

a) Demand Priority

**2**

b) Polling

**2****QUESTION 6**

Describe the following options for organising a NOS host drive.

a) Multiple Boot

**4**

b) Multiple Partition, single-NOS

**QUESTION 7**

Expand the abbreviation **VNC** and describe what VNC is used for..

**4****QUESTION 8**

Describe the following network security policies.

a) Authentication Policy

**4**

b) Access Policy

**QUESTIONS CONTINUE ON NEXT PAGE**

**Marks**

**QUESTION 9**

**4**

List TWO (2) important considerations when choosing a switch.

**QUESTION 10**

**4**

List FOUR (4) tools that are included in Windows 2003 Server to monitor a server's performance.

**Total 40 Marks**

**QUESTIONS CONTINUE ON NEXT PAGE**

<b>SECTION B</b>
<b>ANSWER ANY TWO QUESTIONS</b>

**QUESTION 1****Marks**

- |   |          |
|---|----------|
| <b>a)</b> Explain the difference between a routable protocol and a non-routable protocol.                     | <b>4</b> |
| <b>b)</b> Briefly describe the following FOUR (4) popular network protocols:                                  |          |
| <b>i)</b> Internet Protocol version 4 (IPv4)  | <b>3</b> |
| <b>ii)</b> Internetwork Packet Exchange (IPX)   | <b>3</b> |
| <b>iii)</b> Internet Protocol version 6 (IPv6)  | <b>3</b> |
| <b>iv)</b> NetBIOS / NetBEUI  | <b>3</b> |
| <b>c)</b> Briefly describe the following terms:   |          |
| <b>i)</b> Subnetting  | <b>3</b> |
| <b>ii)</b> Supernetting   | <b>3</b> |
| <b>d)</b> Explain the advantages and disadvantages of each of the following network architectures:            |          |
| <b>i)</b> Local Talk (CSMA/CA)  | <b>2</b> |
| <b>ii)</b> Wireless (CSMA/CA)   | <b>2</b> |
| <b>e)</b> Name and briefly describe TWO (2) methods that the Windows Operating System uses for file security. | <b>4</b> |

**Total 30 Marks****QUESTIONS CONTINUE ON NEXT PAGE**

## QUESTION 2

Marks

- a) Briefly describe the FOUR (4) major implementations of 10 Mbps Ethernet 12
- b) 8

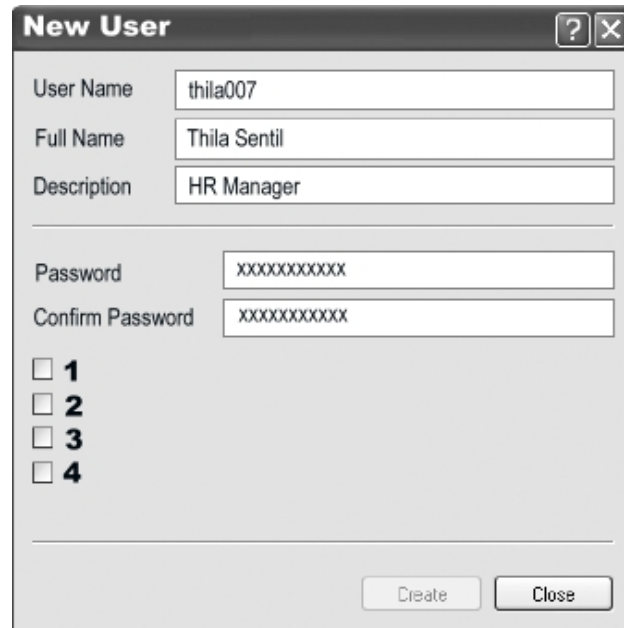


Figure 1

Figure 1 above shows the New User dialog box in Windows XP Professional with all the options that are available to control password information listed as 1, 2, 3 and 4. Identify and explain the password control options that are available (in any order).

- c) List and describe the purpose of the FIVE (5) tabs in the Task Manager in Windows XP. 10
- Total 30 Marks**

## QUESTION 3

- a) State THREE (3) advantages and THREE (3) disadvantages of using a router. 6
- b) ISDN is available in two formats. Name the TWO (2) formats and briefly describe them. 8
- c) Identify TWELVE (12) types of document that a Network Engineer should include in any network plan. 12
- d) List FOUR (4) factors that should be considered before deciding between a dial-up and a dedicated PSTN connection. 4

**Total 30 Marks**

**END OF PAPER**