MCS-022

MCA (Revised)

Term-End Examination

December, 2011

09451

MCS-022 : OPERATING SYSTEM CONCEPTS AND NETWORKING MANAGEMENT

Time : 3 hours   *Maximum Marks : 100*

Note : Question No. 1 is compulsory. Answer any three questions from the rest.

1. (a) What are the two modes in which Windows   **3+5**
         2000 system works ? Explain its
         architecture with the help of a diagram.

    (b) What is the default networking protocol in   **3**
         Windows 2000 ? What are its features ?

    (c) What are the different states of a process in   **6**
         Linux ?

    (d) How does a Token Bus Network Work ? In   **6**
         what ways is its working different from
         token ring ?

    (e) Explain the process used by Kerberos to   **6**
         authenticate network clients logging onto a
         Windows 2000 domain.

(f) Write the Linux/Unix commands for the followings :   6

    (i) List all files have 3 or more characters in their name.

    (ii) Symbolically link two files in a directory.

    (iii) To communicate to another user logged on by writing to the bottom of their terminal.

    (iv) To change the priority of a process.

(g) Explain the characteristics of multimedia operating system.   5

2. (a) What is the role of transmission media in networking ? Differentiate between guided and unguided media with suitable examples.   6

(b) What is a repeater ? At which level of OSI model is it used ? How ?   6

(c) What is a protocol ? List and explain two application level protocols.   8

3. (a) Write a shell script which will redirect the output of the data command without the time into a file. Also, make the flow chart of this shell script.   10

(b) What are the security services provided by **10** the IP Sec ? Explain the Window 2000 IP Sec components. Also, explain the policy options for IP Sec implementation.

4. (a) Explain the principle of CSMA/CD **8** protocol. Also, explain its working with the help of a suitable example.

(b) Describe the process (step by step) of sharing **9** files, folders and devices in Windows XP.

(c) Write the steps to map (assign) a drive letter **3** to a network computer or folder.

5. Differentiate between the following : **20**

(a) Simplex, Half duplex, and Full Duplex Communication.

(b) Symmetric and asymmetric Cryptography

(c) LAN, MAN and WAN

(d) Packet Filtering Gateways and Stateful Packet Filtering