MCA (Revised) / BCA (Revised)
Term-End Examination
⊐౨౩౨౬౺   **December, 2015**

MCS-022 : OPERATING SYSTEM CONCEPTS AND NETWORKING MANAGEMENT

Time : 3 hours   *Maximum Marks : 100*

(Weightage 75%)

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

1. (a) Briefly explain the purpose of the following directories of Linux System :   *10*

    (i)   /bin

    (ii)   /dev

    (iii) /etc

    (iv)   /lib

    (v)   /sbin

    (vi)   /tmp

    (vii) /usr/bin

    (viii) /mnt

    (ix)   /usr/local/bin

    (x)   /usr/games

(b) Explain WINDOWS 2000 layered architecture along with a neat diagram depicting the layers. *10*

(c) Explain the computer security classifications as per the Trusted Computer System Evaluation Criteria (TCSEC). *10*

(d) Explain the process of configuring TCP/IP in WINDOWS 2000. *10*

2. (a) Explain the following in context to Linux operating system : *10*
   (i) File permission modes and changing them
   (ii) Pipes and Filters

(b) Describe the components of logical structure and physical structure of a domain respectively and mention their functionality in WINDOWS 2000 operating system. *10*

3. (a) Differentiate between Mandatory Access Control (MAC) and Discretionary Access Control (DAC) mechanisms. Also, discuss Hardware Tokens and Software Tokens authentication methods along with their merits and demerits. *10*

(b) Write short notes on the following Application Layer protocols : *10*
   (i) FTP
   (ii) TFTP
   (iii) TELNET

4. (a) What is the functionality of a MODEM ? List and explain various types of modems along with their respective features. *10*

(b) What is the use of IPsec ? Mention its features, components and implementation options. *10*

5. Write short notes on the following : *4×5=20*

(a) Virtual Memory in Linux

(b) Using the Mapped Drive in WINDOWS 2000

(c) RAID and its levels

(d) Distributed and Real Time Operating Systems

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