January 2013 Exam Review

Chapter 1(Intro to the Personal Computer)

Be able to define, describe list the following items and be able to recognize a picture if provided.

* 1. IT \*
  2. Power supplies and their connections \*\*
  3. SCSI Cards
  4. RAID adapters
  5. Video Cards FANS
  6. Size of Storage Drives \*
  7. FireWire IEEE 1394a and 1394b \*
  8. Monitor Resolution Factors
  9. Optical Drive
  10. Motherboard \*
  11. RAM \*
  12. SRAM
  13. ROM
  14. Cache Memory
  15. Floppy Drive
  16. ZIF \*
  17. CPU FANS
  18. CPU \*
  19. Modem
  20. Nic- Network Card \*
  21. Berg
  22. Molex
  23. PATA
  24. SATA \*
  25. USB – How to remove safely?
  26. DIMM
  27. SDRAM
  28. DDR SDRAM
  29. DVD drive
  30. DVI cables
  31. CPU – Front Side Bus
  32. CPU Throttling
  33. Types of Video Card Slots eg PCIe and AGP
  34. Give an example of an input device and an output device.. \*
  35. Give an example of a hardware device and software. \*
  36. Give the name of the operating system we use. Name an operating system that can be distributed for free. \*
  37. What two computer components do we not repair because of safety issues?
  38. How can you tell which end of the data cable is pin 1? \*

Chapter 2(Safe Lab Procedures and Tool Use)

* 1. Cleaning tools – Hardware
  2. Cleaning tools – Software eg defrag, CHKDSK
  3. Anti static Wrist Strap - Purpose
  4. Fire Safety Guidelines \*
  5. ESD \*
  6. Tools to Prevent ESD
  7. Hazards in Computers \*
  8. MSDS sheets
  9. RFI –What is it? How can it be controlled?

Chapter 3(Computer Assembly)

1. ZIF \*
2. POST \*
3. BIOS Setup \*

Chapter 4(Preventative Maintenance and Troubleshooting)

a. Examples of preventative maintenance plans \*

b. Troubleshooting Process Order \*

c. Open vs Closed Ended questions \*

Chapter 5( OS)

1. Operating system \*
2. Gui
3. Cli
4. Differences between 32 bit OS and 64 bit OS\*
5. NOS \*
6. NTFS – Why use it instead of FAT 32? \*
7. Convert.exe \*
8. FAT
9. Primary Partitions vs External Partitions
10. Logical Partitions
11. Msconfig
12. Steps for Upgrading an OS
13. Task Manager
14. Creating accounts
15. Reasons for Clean Install
16. Registry Files – HKEY\_CLASSES\_ROOT, \_CURRENT\_USER,\_ LOCAL\_MACHINE, \_CURRENT\_CONFIG
17. Steps for adding Windows Components
18. STARTUP.INI
19. BOOT.INI
20. Ntbackup
21. Boot sequence graphic
22. CHKDSK
23. Invalid system disk error
24. Types of Memory eg extended
25. Kernel Patch Protection
26. XP Repair

Chapter 6 (Laptops)

* 1. Connecting a laptop to a projector
  2. Proprietary parts \*
  3. Laptop CPU vs Desktop CPU
  4. Methods of Power Management – Hibernate, Standby
  5. Know steps to Setting up Power Options and where
  6. Laptop Cleaning Procedures
  7. Optimal Operating Performance for a Laptop
  8. Hot swappable components installation eg USB and FireWire
  9. Standby Mode
  10. Steps for replacing Non-hot swappable laptop components
  11. Troubleshooting external peripherals
  12. Troubleshooting Laptop Problems
  13. Docking Stations \*

Chapter 7 (Printers)

1. What should be done after installing a scanner?
2. Know Troubleshooting Steps for Printers
3. Look at Common Printer Problems and Solutions
4. Printer process Order \*\*
5. Total Cost of Ownership
6. DPI \*
7. Impact Printers- What are they used for today?
8. How can a Printer be shared? (2)
9. Slow Printer with Graphics – how can it be improved?
10. Where to get upgraded printer drivers?
11. Inkjet vs Laser printers

Chapter 8(Networks)

1. Advantages /Disadvantages of Networking \*
2. WAN
3. LAN \*
4. Client Server vs Peer to Peer Network
5. DHCP \*
6. Multicast vs Broadcast
7. Logical topology
8. Ethernet /Twisted Pair \*
9. Types of Cables \*
10. OSI model \*
11. PLC \*
12. SSH
13. Ipconfig /all
14. Ping – local vs remote \*
15. VPN
16. Star topology
17. Mac Address Filtering
18. TCP/IP
19. Network Printing – What type of cables /medium is used?
20. Common Port numbers
21. Default Gateway Address
22. Subnet Address

Chapter 9 (Security)

1. Virus \*
2. Spoofing
3. Phishing \*
4. Password security/policies
5. Steps to Installing Service pack – Remember Last restore Point
6. Mac Address Filtering – Wireless
7. Ping of Death
8. Ssh
9. Syn flooding
10. How to erase Hard Drive \*

Chapter 10 (Communication Skills)

1. What are the do’s and don’ts of dealing with customers? \*
2. SLA \*
3. Net etiquette \*
4. What should you do if the customer has a preferred technician?
5. Steps to troubleshoot new installation of hardware.
6. Error Invalid Disk when floppy is in the drive