## Lecture No 4

- Cyber security refers to the <u>technologies</u> and <u>processes</u> designed to protect computers, networks and data from unauthorized access and attacks delivered through the Internet by cyber criminals.
- 2. Protecting computer system and information from unauthorized access or destruction / abuse.
- 3. Security deal with three primary issues, called the CIA triad.
- 4. Confidentiality Assurance that only authorized user may access a resource.
- 5. <u>Integrity</u> Assurance that resources has not been modified.
- 6. Availability Assurance that authorized user may access a resource when requested.
- 7. Protecting information in the digital age requires <u>constant caution</u> to deter thieves who would steal financial, proprietary, and personal identification data.
- 8. Cyber security is necessary since it helps in <u>securing data</u> from threats such as data theft or misuse, also safeguards your system from <u>viruses</u>.
- 9. Security measures provides full security services to balance the needs of providing information to those who need it with taking action to mitigate the <u>dynamic threats</u> posed by cyber thieves and cyber terrorists.
- 10. Your home computer is the popular target for intruders.
- 11. We can use our computers to attack other computers on the internet.
- 12. Intruder attacks home computer because it is not very secure and easy to break into.
- 13. They do attack your computers by send us a E-mail with virus.
- 14. Trojan horses are such programs which are used as the back doors.
- 15. A Virus is a "<u>program</u>" that is loaded onto your computer without your knowledge and runs against your wishes.

- 16. Virus can reach to our computer through <u>CD-Rom</u>.
- 17. Virus can reach to our computer through  $\underline{E} \underline{\text{mail.}}$
- 18. Virus can reach to our computer through <u>Websites</u>.
- 19. Virus can reach to our computer through download files.
- 20. Install a security suite that protects the computer against threats such as viruses and worms.
- 21. Handle  $\underline{\mathbf{E}}$   $\underline{\mathbf{mail}}$  attachments carefully.
- 22. A person who secretly gets access to a computer system in order to get <u>information</u>, <u>cause</u> <u>damage</u>, etc.
- 23. Hackers attack where they see weakness.
- 24. A system that hasn't been updated recently has flaws in it that can be taken advantage of by hackers.
- 25. Regularly <u>update</u> your operating system.
- 26. Install Anti virus software's.
- 27. The word "malware" comes from the term "Malicious software."
- Malware is any software that infects and damages a computer system without the owner's knowledge or permission.
- 29. Download an <u>anti-malware</u> program that also helps prevent infections.
- 30. Activate Network Threat Protection, Firewall, Antivirus.
- 31. <u>Trojan horses</u> are email viruses that can duplicate themselves, steal information, or harm the computer system.
- 32. These viruses are the most serious threats to computers.
- 33. Security suites, such as <u>Avast Internet</u> Security, will prevent you from downloading Trojan Horses.
- 34. Password attacks are attacks by hackers that are able to determine passwords or find passwords



to different protected <u>electronic</u> <u>areas</u> and <u>social network sites</u>.

- 35. Maintain <u>current software</u> and <u>updates</u>.
- 36. Never share <u>passwords</u>.
- 37. Do not click random links.
- 38. Do not download <u>unfamiliar</u> software off the Internet.
- 39. Log out or lock your computer.
- 40. Remove <u>unnecessary</u> programs or services.
- 41. Frequently back up important documents and files.
- 42. Protects system against viruses, worms, spyware and other unwanted programs.
- 43. Protection against data from theft.
- 44. Protects the computer from being <u>hacked</u>.
- 45. <u>Simple</u> and <u>practical</u> prevention methods are explained in the lesson to prevent PCs from infection.