Computer Lab - Practical Question Bank
FACULTY OF COMMERCE, OSMANIA UNIVERSITY

B.Com (Computer Applications) CBCS Semester - VI
Cyber Security Practical Question Bank DSE-603 (b)

Objective : Analyze cyber-attacks, types of cybercrimes, cyber laws and also how to protect the entire Internet community from such attacks. Interpret and forensically investigate security and network incidents. Apply policies and procedures to manage Privacy issues.

Note : a) Write the below Program using C language or Python.

Time: 60 Minutes

Record   : 10
Skill Test   : 15
Viva   : 10
Total Marks : 35

1. What are the Roles and Responsibilities of System Administrator? Write the steps for creating the User account, setting permissions and protecting your files with password.

2. Write the steps for disk partitioning and perform operations like shrinking, Extending, deleting and formatting.

3. Prepare a Case study on Ransomware attacks. (Ex: MediaMarkt)

4. Write the steps for installation of software from Open source Mode and Paid subscription mode

5. Write the steps to make Microsoft Chrome as a default browser, Add Active X Controls and Add–on to the Browser.

6. Write the steps to establish peer to peer network connection using two systems in a LAN

7. What is WiFi? How do you configure the Wifi on Windows operating system

8. Write the steps to Install and configure Network Components like switches, Hub and Modem and how do you connect to Dial-Up networking

9. What are the features of firewall? Write the steps in providing network security and to set Firewall Security in windows.

10. Write the steps for installation of System Software, Application software and Antivirus.

11. What do you mean by Spooling printers? Write the steps for spooling printer.

12. Write a Program to identify the category of IP address for a given IP address

13. Write a Program to check the strength of the password.

14. Write the steps to transfer files between Wireless communication using Blue Tooth and FTP

15. Prepare a case study on Cosmos Bank Cyber attack in Pune

16. Write a Program to search the given pattern using optimized algorithm

17. Prepare a case study on Social Media Crime that occurred in Pune 2021.

18. Prepare a case study on Japanese Bank for Keylogger Scam

19. Write the steps to prevent the denial of Service attacks.

20. Write the steps to demonstrate intrusion detection system (ids) using the tool SNORT

21. What is Malware? Write the steps to remove the malware from your PC.

22. What are the various types of Vulnerabilities for hacking the web applications.

23. Write steps for sharing files and printer remotely between two system

24. List out the various Mobile security apps . Write the steps to install and use ,one of the mobile security app

25. Write the algorithm for encoding and decoding the Hash-Based Message Authentication Code(HMAC)

26. Prepare a case study on Mahesh Bank cyber attack.

27. Prepare a case study of cyber attack through Facebook Account

28. Create a Presentation on " Ethical Hacking" at least 10 slides

29. Write a Program to download a file from HTTP server

30. Create a Presentation on "Security Protocols" (atleast 5 protocols)

31. Write the steps to detect the number of devices connected to wifi and block unauthorized devices

32. Prepare a case study on Crypto currency Cyber attack. (Ex: Grim Finance)

33. Write an algorithm and Program for encrypting a plain text and decrypting a cipher text using Caesar Cipher.

34. Write an algorithm and Program to implement Data Encryption Standard (DES) for encryption and decryption

35. Write RSA algorithm and Program to implement RSA Standard for encryption and decryption

36. Write the steps to analyze the E-Mail Application's security vulnerabilities.

37. What is SQL Injection? Write steps for SQL Injection attack on Insert, Update and Delete.

38. Write an algorithm and a Program to implement Diffie Hellman Key

39. Write an RSA algorithm and Program to implement digital Signature Scheme

40. Write an algorithm and Program to generate Pseudo Random numbers in a range

41. Create a Presentation on "Cyber Security Regulations" with at least 10 slides

42. Create a Presentation on "Role of International Law" with at least 10 slides

43. Create a Presentation on "Cyber Forensics" with at least 10 slides

44. Create a Presentation on "Cyber Security Standards" with at least 10 slides

45. Create a Presentation on "Cyber Security Attacks" with at least 10 slides

46. Write a Program to validate your Email address

47. Write the steps to check the devices connected to your internet and about data usage

48. Create a Presentation on "Cyber Security Policies 2013" with at least 10 slides

49. Create a Presentation on "State and Private sectors in Cyber Space" with at least 10 slides

50. Write the steps to read Email Headers and identify them as SPAM.