SYLLABUS

UNITS

1. Introduction of Cyber security
2. Networking Fundamental
3. Linux AND COMMAND LINE PROFICIEN
4. Web Technologies and security
5. Penetration Testing AND VULNERABILITIES
6. Mobiles and IOT security
7. ADVANCE Hacking Techniques
8. Digital Forensic and Incident Response
9. PRIVACY and ANONymity
10. TOOLS and Resources

Best Language

1. BASH - The Bourne - Again- shell
2. PYTHON - details
3. HTML, CSS, Java script
4. PHP
5. C, C++ - create malware, exploitation
6. JAVA - Android hacking
7. Flutter
8. Swift IOS hacking

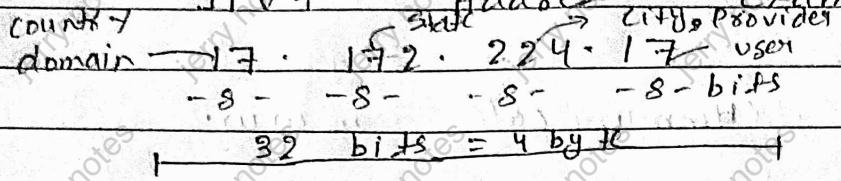
Basic

CHAPTER - 06

IP (Internet protocols)

IP stands for Internet Protocol address

IPV4 Address Example



Two Types of IP

IP V4 (version 4)	IPV6 (version 6)
Address size:	Address size
32 bit number	128 - bit number
Address format	Address format
Dotted Decimal Notation	Heta-decimal Notation
192 . 159 . 252 . 76	3ffe : F200 : 0234 : ab00
	0123 : 4567 : 8901 : abcd
Prefix Notation	Prefix Notation
192 . 149 . 0.0/24	3ffe : 200 : 0234 : /[illegible]
Number of addresses:	Number of addresses:
(2^32) 4.7 billion addres	(2^128) 340 trillion addresses

Internet Active users all over the world

= 5.3 billion

P.T.O.

Types of IP address

(1) Public (2) Private (3) Static (4) Dynamic

- Private used to communicate a fixed / local area.
- Public used to communicate www.
- Public communicate to private by came into the private range
- Public and Private can't communicate directly
- STatic is fixed, it is used by servers due to limited IP's.
- Dynamic is changable or transferable due to situations.
- Mobile phones, laptops and many more are used dynamic IP
- Private and public also used static and dynamic IPs.

ISP = Internet Service Provide
OUI = Organisation unique identifier
NIC = Network interface controller