

# CS 204

## Lesson: 1

Q1: Cybers :-

cybers can be used as, cyber attack, cyber security and cyber bullying.

The word "cybers" means Involving of network.

Cyber attack → attack by using internet.

Cyber security → Security on internet.

cyber bullying → internet bullying.

Q.2

## Cyber Society:-

Focuses on construction, maintenance and facilitation of community in electronic networks and computer mediated communication.

Q.3

## Cyber Culture:-

The use of world wide web by peoples are group of people for the exchange of social expectations, customs, history and language also called cyber culture.

→ WWW is the collection of electronic documents

→ Each electronic documents on the web is called web page. like text, graphics, audio and video e

Q.4

## Components of Cyber Culture:-

- Internet
- Website.
- E-Mail.
- Blog.
- Online chat
- E-Commerce.
- Social networks.

Q.5

## Internet:-

- The network formed by the co-operative interconnection of a large number of computer networks.
- No one owns the internet.
- There is no central administration to the internet.
- Community of people.
- Collection of resources.

Q.6

## Website:-

- A location connected to the internet that maintains one or more web pages.

- web Pages are the building block of the website.
- web Pages includes documents like text, audio and graphics etc.

Q.7

### E-Mail

- E-Mail (Electronic Mail).
- Electronic mail most commonly called email.
- E-mail is most widely used in internet.
- Messages that are sent electronically from one computer to another as E-mail.

Q.8

### Blog:-

A blog is a discussion or informational site published on the world wide web consisting of discrete entries is called blog.

Q.9

### Online Chat:

Any kind of communication over the internet that offers a real time transmission of text messages from sender to receiver is called online chat.

Q.10

### E-Commerce:-

→ Electronic commerce, commonly written as e-commerce.

→ The trading or facilitation of trading in products or services using computer networks such as Internet.

#### Ex:

→ Online shopping.

→ Online market places.

→ Business to business buying and selling.

Q.11

### Social Networks:-

A dedicated website or other application which enable users to communicate with each other by posting information, comments, images, videos and messages also referred as social networks.

#### Ex:

→ Face book.

→ Twitter.

Q.12

### Cyber space :-

Cyber space is a public space where individuals can meet, exchange ideas, share information, provide social support and conduct business etc.

Q.13

### Effects of Cyber culture on Society:-

- Great Impact on Individual life.
- Style of teaching has been changed.
- Teacher and student interactivity can be formed online.
- Cyber culture has great influence in the business world.
- Cyber culture reduced the gap b/w groups and individuals.
- Face to face communication is becoming weak due to emerging of social networks.
- Business decision can be made through video conference.

## Lesson No. 2

### Q.1

#### E-Commerce:-

Electronic commerce are commonly written as e-commerce.

The trading or facilitation of trading in products or services using computer networks such as Internet.

- Ex: (i) Online shopping.  
(ii) Online market places.

### Q.2

#### Domains of E-Commerce:-

- (i) Physical Domains.  
(ii) Digital Domains.

### Q.3

#### Traditional E-Commerce:-

- (i) All the dimensions are physical in nature.  
(ii) Perform business transaction off-line.  
(iii) Buy and sell products through physical agents.

### Q.4

#### Pure - E Commerce:-

- (i) All dimensions are digital in nature.

- (i) Pure online organization.
- (ii) Buy and sell products online.

Q.5

### Hybrid Approach:-

A combination of physical and digital dimensions.

Q.6

### Types of E-Commerce:-

- (i) Business to business model - B2B
- (ii) Business to consumer model - B2C
- (iii) Consumer to business model - C2B
- (iv) Consumer to consumer model - C2C

Q.7

### Business to Business (B2B) Model

B2B model describes commerce transactions between businesses, such as between a manufacturer and wholesaler, or between a wholesaler and retailer.

Q.8

### Business - to - Consumer (B2C) Model

The B2C model involves transactions between business organizations and consumers. The B2C model

also includes services online banking, travel services and health information.

Ex: (i) www.daz.pk.

(ii) www.amazon.com etc.

### Q.9

#### Consumer to Business (C2B) Model:-

C2B model is a type of commerce where a consumer or end user provides a product or services to an organization.

Ex: Priceline.com

### Q.10

#### Consumer to Consumer (C2C) Model:

The C2C model involves transaction b/w consumers. A consumer sells directly to another consumer.

Ex (i) eBay.com

(ii) olx.com.

## Q.11

### E-Commerce Example:-

Men's Fashion.

Women's Fashion.

Jewelry and Watches.

Mobile and Tablets.

TV and cameras.

Health and Beauty.

Sporting Goods.

## Q.12

### Process of E-Commerce:-

A consumer uses web browser to connect to the home page of a merchant's web site on the Internet.

The selected items are placed in the electronic equivalent of a shopping cart.

These are some common steps of transaction online.

## Q.13

### Advantages of E-Commerce:-

i) Faster buying.

ii) You can shop anywhere in the world.

(iii) Low operational costs and better quality of services.

(iv) Buying selling 24/7.

(v) Easy to start and manage business.

### Q.14

#### Disadvantages of E-commerce:-

(i) Unable to examine product personally.

(ii) Communication improvement.

(iii) Not everyone is connected to the internet.

(iv) Possibility of credit card number theft.

### Q.15

#### E-commerce Safety Tips:-

i) Protect your personal information

ii) Make sure the site is genuine.

iii) Check out the sellers.

iv) Turn your computer off when your shopping finished.

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## Lesson. NO. 3

### Q.1

#### Cyber Crimes:-

Any crime that involves a computer, mobile and a network. Computer may be used as weapon for crime.

### Q.2

#### Categories of Cyber Crime:-

- i) Crime against Individuals.
- ii) Crime against Property.
- iii) Crime against Government.

### Q.3

#### Cyber crime against Individual:-

This type of cyber crime can be in the form of hacking, Identity theft, cyber bullying and cyber stalking etc.

### Q.4

#### Cyber Crime against Property:-

In the real world criminal can steal and rob, even in the cyber criminals resort to stealing and robbing.

## Q.5 Cyber Crime against Governments

This category is not as common as the other two categories, crime against a government are referred to as cyber terrorism.

In this category, criminals hack government websites, and military websites.

## Q.6 TYPES of Cyber Crime :-

- Hacking.
- Software Piracy.
- Cyber stalking.
- Malicious Software.
- Identity theft.
- Cyber Bullying.
- Email spamming and spoofing.
- Computer vandalism.

## Q.7 Hacking :-

Hacking in simple term means illegal access into computer system without the

Permission of the computer owner.

Q.8

Software - Privacy:

This crime occurs when a person violates copyrights and unauthorized copying of software.

Q.9

Cyber Stalking:-

The crime in which the attacker harasses or threatens a victim using electronic communication. Such as e-mail and instant messages (IM).

Q.10

Malicious Software:-

These are internet based software that are used to disrupt a network. The software is used to gain a system to steal sensitive information or causing damage software and hardware. (virus, worms and Trojan horse)

Q.11

Identity theft:-

A criminal accesses data about a person

bank account, credit cards and debit cards.

### Q.12

#### Cyber Bullying:-

Cyber bullying is when the internet and related technologies are used to bully other people in a deliberate, repeated and hostile manner. It is called the cyber bullying.

### Q.13

#### E-mail spamming and spoofing:-

E-mail spoofing refers to email that appears to have been originate from one source and it was actually sent to another source is called email spoofing.

E-mail spamming:- Refers to sending email to thousands and thousands of users similar to chain letter.

### Q.14

#### Computer Vandalism:-

Damaging or destroying data rather than stealing or misusing them is called

Cyber Vandalism.

Q.15

Safety Tips of cyber crime:-

- i) Use antivirus software.
  - ii) Install firewalls.
  - iii) Uninstall unnecessary software.
  - iv) Maintain backup.
  - v) Never send your credit cards number.
  - vi) Avoid sending any photograph online to the strangers.
  - vii) Do not open mails from strangers.
  - viii) Do not respond to harassing or negative messages.
  - ix) Learn more about Internet Privacy.
  - x) Keep your operating system up to date.
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## Lesson NO. 4

Q.1

Cyber Security:-

Cyber security refers to the technologies and processes designed to protect computers, networks and data from unauthorized through the Internet by cyber criminals is called cyber security.

Q.2

Security deals three primary issues

- Confidentiality
- Integrity.
- Availability.

Q.3

Confidentiality:-

Assurance that they only authorized users may access a resource.

Q.4

Integrity:-

Assurance that resources has not been modified.

Q.5

Availability:-

Assurance that authorized users may access a resource when requested.

Q.6

Why Intruders attack home computers:

Not very secure.

Easy to break.

Q.7

Major Security Problems:-

- Virus and worms
- Hackers.
- Malware.
- Trojan Horses.
- Password Cracking.

Q.8

Virus and worms:- with solution:

A virus is a program that is loaded onto your computer without your knowledge and runs against your wish.

Solution:- Handle E-mail attachment carefully.

### Q.9

How many ways that viruses can reach your computer?:-

- CD-Rom
- E-mails
- Websites.
- Downloaded files.

### Q.10

#### Malware with solution:-

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.

#### Solution:-

- Activate network.
- Threat Protection
- Firewall.
- Antivirus

### Q.11

#### Password Cracking:-

Password attacks are attacks by hackers

that are able to determine passwords or find passwords to different protected electronic area.

Solution: Use always strong password.

### Q.12

Things to do for protecting your computer

- i) Use security software.
- ii) Never share passwords.
- iii) Don't click random links.
- iv) Maintain current software and updates.
- v) Log out or lock your computer.
- vi) Don't download unfamiliar software.

### Q.13

Advantages of cyber security:-

- Protects system against viruses & worms.
  - Protection against data from theft.
  - Protect the computer from being hacked.
  - Minimizes computer freezing.
  - Gives privacy to users.
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## Lesson. No: 5

### Q.1

#### Cryptography:-

The method of hiding Plain texts in such a way as to hide its substance is called as cryptography.

### Q.2

#### Caesar's Cipher rule:-

ABCDEFGHIJKLMNOPQRSTUVWXYZ and sliding the everything up by 3.

It becomes

DEFGHIJKLMNOPQRSTUVWXYZABC.

where,

$$A = D$$

$$B = E$$

C = F and so on--

### Q.3

#### Conventional Cryptography:-

Plaintext  $\rightarrow$  encryption  $\rightarrow$  Ciphertext  $\rightarrow$  Decryption  $\downarrow$   
Plaintext

It is very fast. It is useful for encryption

data that is not going anywhere.

## Lesson. No: 6

### Q.1

#### Cyber Law:-

Cyber law refers to all the legal and regulatory aspects of the internet and its users.

### Q.2

#### Role of law and lawyers:-

The 1st rule of management is delegation consultancy.

Subject matter expert.

A blend of law and technology.

Uncited law 1966.

Modern law of E-commerce 1996.

E-Signatures 1996.

#### Resolution Policy 1998:

DMCA 1998

EUCD 2001

ITA 2000

Q.3

## Cyber Regulation in Pakistan:-

- The electronic transaction ordinance 2002
- Prevention of electronic crime ordinance 2008.

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## Lesson. NO. 7

Q.1

## Cyber Law in Pakistan:-

There are two different law in Pakistan. Deals with crime of Internet. Two of them most common are.

- Electronic transaction ordinance 2002.
- Electronic cyber crime Bill 2007.

Q.2

## Electronic transaction ordinance 2002

- First IT-relevant legislation.
- Protection for Pakistan e-commerce locally and globally.

- Protect Pakistan's critical infrastructure.
- No recognition of electronic documents.
- No recognition of electronic records.

### Q.3

#### PRE (ETO), 2002:-

- No recognition of electronic documents.
- No " " " " records.
- Failure to authenticate digitally.
- No online transaction system.
- No rules for all of these.

### Q.4

#### POST - (ETO), 2002.

- Electronic documentation and record recognition.
- Electronic and digital form of authentication.
- Messages through E-mail, fax and mobile.
- There are 43 sections in this ordinance.

### Q.5

#### 43 Section in ETO 2002

- Recognition of electronic documents.
- Electronic communication.
- Web sites.

- Digital signatures.
- Stamp duty.
- Attestation
- Jurisdiction.

### Q.6

#### violation of Privacy Information:-

- i) Gain or attempts to gain access
- ii) To acquire information unauthorized
- iii) Imprisonment 7 Years.
- iv) Fine RS. 1 million.

### Q.7

#### Damage to Information System:-

- Alter, modify, delete, generate and transmit.
- Create hindrance in Information access
- Imprisonment 7 Years.
- Fine RS. 1 million.

### Q.8

#### Electronic cyber crime bill 2007:

This bill deals with

Data damage.

Electronic fraud

Electronic forgery

Cyber terrorism

Cyber spamming

Cyber stalking

**Punishment**

**Fine**

(i) Data damage

3 Yrs

3 Lac

(ii) Electronic fraud

7 Years

7 Lac

(iii) Electronic forgery

7 Yrs

7 Lac

(iv) Cyber stalking

3 Yrs

3 Lac

(v) Spamming

6 month

50,000

(vi) Cyber terrorism

50 million

(vii) Spoofing

3 Yrs

3 Lac

## Lesson. NO. 8

### Q.1

What is Jurisdiction:

The right, Power or authority to administer Justice by hearing and determining controversies.

### Q.2

TYPES of Jurisdiction:-

- Territorial Jurisdiction
- Extra Territorial Jurisdiction
- Cyber Jurisdiction.

### Q.3

Territorial Jurisdiction:-

Jurisdiction over cases arise in our involving persons residing within a territory as territory.

### Q.4

Extra Territorial Jurisdiction:-

It refers to court ability to exercise power beyond its territorial limits.

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Q.5

Cyber Jurisdiction:-

A virtual approach defining the cyber world beyond the boundaries of nation states enforcement of cyber law uniformly accepted.

Q.6

Cyber dispute conflict:-

A tense situation between nation states or organized groups where unwelcome cyber attacks may result in retaliation.

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