

**COMPUTER SCIENCE**

**1. MULTIPLE CHOICE QUESTIONS:**

1. Cyber word is taken among which of these?

a) Cybercrime    **b) Cybernetic**    c) Cyber Attack    d) Cyber Security

2. Copying and selling of software or any computer-based material is known as?

a) Phishing            b) Stalking            **c) Piracy**            d) Hacking

3. A malware, which acts like a spy in computer system?

**a) Spyware**    b) Computer Virus            c) Adware            d) Ransom ware

4. Which type of security technique, which converts password into special Signs?

a) Strong password            b) Firewall    c) Digital Signature    **d) Encryption**

5. IT Act 2000 is known by which another name?

a) IT Act 2008    **b) ITA 2000**    c) Information Act    d) Income Tax Act

6. An electronic environment in which internet users communicate with each other?

a) World wide web    b) Internet    **C) Cyberspace**    d) Cyber cafe

**2. FILL IN THE BLANKS :**

1. **Malware** corrupt computer system.

2. Digital signature is a digital code which is used to transmit or verify documents online
3. Antivirus software keeps our computer safe from virus.
4. Firewall acts as a secure wall in the computer system.
5. Any unauthorized person alters the website with the use of cyber attacks.
6. URL's of servers connected with internet are stored at World Wide Web.

### 3. VERY SHORT ANSWER TYPE QUESTIONS:

1. When first IT Act comes into: **October 17, 2000**
2. Name any two anti-viruses: **1. Avira 2. AVG 3. Norton**
3. Write full form of CERT-IN: **Indian Computer Emergency Response Team**
4. WRITE the complete form of ITA 2000: **Information Technology Act 2000**

### 4. SHORT ANSWER TYPE QUESTIONS (WRITE THE ANSWERS IN 4-5 LINES)

#### **1. What is piracy? Define it?**

**ANS:** It is a type of cyber threat in which a person steals or copies the software or any computer based material and sold to other one without the permission of owner.

#### **2. What do you know about web jacking?**

**ANS:** Web jacking is an unauthorized operation in which a hacker makes unauthorized changes to any website for his own benefit and alter the information contained on that website.

### 3. What are salami attacks?

**ANS:** Salami attack is an online attack that are commonly seen in the banking sector. Such online attacks target credit or debit card information of a bank customer in such a manner that a small amount of money goes out of their accounts into the account of the opener and the customer does not even know about it .This attack is very difficult to identify .

### 4. Give a brief description about antivirus software?

**ANS:** Antivirus is a software that protects our computer system from virus .This software does not allow the malwares to enter in our system. Even if virus comes into our computer system, we can easily scan our system with the help of antivirus and easily eliminate the virus from it.

### 5. Differentiate between Cyber Space and World Wide Web?

**ANS :**

Sr. No.	Cyber space	World Wide Web
1.	Cyber Space cannot be defined as physical object.	World Wide Web can be defined as physical object.
2.	Cyber Space is an environment created by World Wide Web.	World Wide Web stores web address of all servers, IP address and links of web pages.

### 5. LONG ANSWER TYPE QUESTIONS (WRITE THE ANSWERS IN 10-15 LINES):

#### 1. What are the cyber-attacks? Describe five types of cyber attacks?

**ANS:** Cyber-attack is any type of action that targets computer systems and computer networks using various methods to steal alter or destroy the data or information. Different types of cyber attacks are explained as follows:

1. **PIRACY:** It is a type of cyber threat in which a person steals or copies the software or any computer based material and sold to other one without the permission of owner.
2. **HACKING:** Hacking is an attempt to exploit a computer system or network. In others words, we can say that it is an unauthorized access to or control over computer systems for some illicit purpose.
3. **EMAIL SPOOFING:** Email spoofing is a form of cyber attack in which a hacker sends an email that has been manipulated to seem as if it originated from a trusted source. In email, spoofing many less aware users share their confidential information to a given address and suffers a lot.
4. **WEB JACKING:** Web jacking is an unauthorized operation in which a hacker makes unauthorized changes to any website for his own benefit and alter the information contained on that website.
5. **DENIAL OF SERVICE ATTACKS:** Denial of Service attack is an attack used to shut down a machine or network making it inaccessible to its intended user. Attackers accomplish this by flooding the traffic or sending information that triggers a crash.

## 2. Describe the causes of cyber attacks in detail?

**ANS:** The main causes of Cyber attacks are explained as below:

1. Easy access to the internet.

2. Lack of technical information.
3. Non-use of security and privacy.
4. Ignorance of IT crime and law.
5. Excessive use of mobile technology and social media.
6. Criminal wisdom or feeling of revenge.

### 3. What is malware? Describe five types of malwares?

**ANS:** Malware is a combination of two words 'mal', which means malicious and 'ware' which means software .So in computer systems a group of malicious programs is known as malware. Different types of malware are explained below:

1. **ADWARE:** Adware are malicious programs that infects the computer system by means of an add on. These are entered into the computer when a user clicks on an unwanted adorn while surfing on the internet.
2. **SPYWARE:** Spyware is defined as malicious software designed to enter your computer system gather data about you and forward it to a third party without your consent.
3. **VIRUSES:** A computer virus is a malicious piece of computer code designed to spread from device to device. It is a subset of malware, which have a self-copying property and usually designed to damage a device or steal the data.
4. **RANSOME WARE:** Ransom ware is a malicious program that log into the computer and lock the entire computer system the criminal who deliver this type of program to someone's computer and ask for money in exchange for unlocking the computer.

5. **COMPUTER WORMS:** A computer worm is a malware that reproduces itself and spreads over the network connections. It does not usually infect the computer files but rather infects another computer on the network.

4. What is a cyber security? Describe five types of cyber security techniques?

**ANS:** Cyber security is the collection of efforts to prevent our system from data theft or any other type of cyber threats. Cyber security is a type of computer software or programs. Different types of cyber security techniques are explained as below:

1. **DIGITAL SIGNATURES:** It is a security technique used to authenticate a user to a computer-based system with a digital code and to transmit or verify the data and any other online documents. It is most commonly technique used in the banking sector.
2. **ANTIVIRUS:** Antivirus is a software that protects our computer system from virus. This software does not allow the malwares to enter in our system. Even if virus comes into our computer system, we can easily scan our system with the help of antivirus and easily eliminate the virus from it.
3. **ENCRYPTION:** Encryption is the technique in which information is converted into secret code that hides the information's true meaning.
4. **STRONG PASSWORD:** Under this technique, our password will be as complicated and hard so that any other person can easily break it. Our password must contain a combination of alphabets, digits and special symbols. For example, asdf@8765

5. **FIREWALL:** It is a security technique in which firewall works like a strong wall when we use internet firewall block the malware from accessing our computer system and prevent it from entering in our computer.

**5. What is IT Act 2000? Describe its features?**

**ANS:** IT Act 2000 was passed by government of India on October 17, 2000. It is an act related to cyber crime and electronic commerce. The various features of IT ACT 2000 are given below:

1. Digital signatures are legally considered in this act.
2. This act is fully concerned with the Cyber-crime and electronic commerce.
3. It gives a full approval to all types of financial transactions made through secure electronic media.
4. This act provides a legal recognition of government offices and agencies filling and submitting the forms online.