

COMPUTER SCIENCE NOTES FOR 7TH CLASS (FOR ISLAMABAD)

Q. Develop a project to bounce a moving ball against outside walls.

Answer: To create a bouncing ball in Scratch, we are going to create a custom sprite that has 5 costumes. A costume in Scratch is a unique drawing or pose of a sprite. So, you can add multiple costumes to any sprite and give the sprite a different look or pose when it turns a certain direction (say, left or right), etc.

1. Hover over "Choose a Sprite" and click "Paint."

2. Name the costume "bounce-1."

3. Draw a medium-sized circle with a dark color and no outline.

4. Select the circle and line it up with the center of the canvas.

5. Right-click the costume and duplicate it 4 times until there are costumes named "bounce-1" through "bounce-5."

6. With the Select tool, click and drag on the sides of the circles to make them "squash" and "stretch." Look at the images below for examples.

These costumes will mimic the look of a ball as it bounces up and down, and "squashes" as it makes impact with the ground/wall.



Q. Design a piano with eight keys. Attach a different sound with each key.

Answer:



Unit 5

DIGITAL CITIZENSHIP

Solution to Exercise

❖ **Multiple choice questions:**

1. The set of moral principles for responsible use of Internet, computer and ICT devices is known as:

- a. Computer Education
- b. Computer Ethics
- c. Online Safety
- d. Internet Surfing

2. If you back up your data, this is a _____ against the threat of data loss.

- a. firewall
- b. class
- c. security
- d. spammer

3. A _____ is someone who uses a computer and a network or

COMPUTER SCIENCE NOTES FOR 7TH CLASS (FOR ISLAMABAD)

Internet connection to introduce into another computer system to perform an illegal act.

- a. **hacker** b. programmer
c. terrorist d. spammer

4. _____ is a form of warfare which is used by cyber terrorists to harm or gain control of important computer systems.

- a. Cyber hacking
b. Cyber tapping
c. Cybercrime
d. **Cyber terrorism**

5. Which of the following crime is related to stealing personal information?

- a. Copyright b. **Identity theft**
c. Digital Plagiarism
d. Cyberbullying

6. Copying someone else's work and presenting it as your own is known as:

- a. Copyright b. Identity theft
c. **Digital Plagiarism**
d. Cyberbullying

7. Threatening or targeting a person with the use of digital technology is known as:

- a. Cyber security b. Online activity
c. Cyber ethics d. **Cyberbullying**

8. Which of the following is NOT safe while using the Internet?

- a. Homework research
b. Online shopping
c. **Arrange to meet a stranger**
d. Chatting with school friends

❖ **Short response questions:**

Q. 1: What is intellectual property right?

Answer: Intellectual property rights are the rights given to persons over the creations of their minds. They usually

give the creator an exclusive right over the use of his/her creation for a certain period of time. For example, patents, copyright and trademarks, etc.



Q. 2: What is piracy? How can you protect yourself from online theft of your personal information?

Answer: Digital piracy is a type of theft. Copying software or any other type of digital content without the permission of creator is stealing and it is illegal.

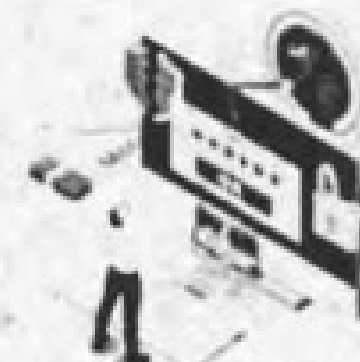
Protect Yourself from Online Theft

The following principles and guidelines are to be followed to be safe, responsible and respectful while using digital technology:

- Use computer in responsible way that shows respect to everyone online.
- Never use bad language while using social websites.
- Do not use computer to harm others.
- Do not use computer to steal, edit or destroy other's information.
- Do not use copyright software which you have not purchased.

**PROTECT
YOURSELF
from**

IDENTITY THEFT



COMPUTER SCIENCE NOTES FOR 7TH CLASS (FOR ISLAMABAD)

Q. 3: Define cybercrime and name different online environment?

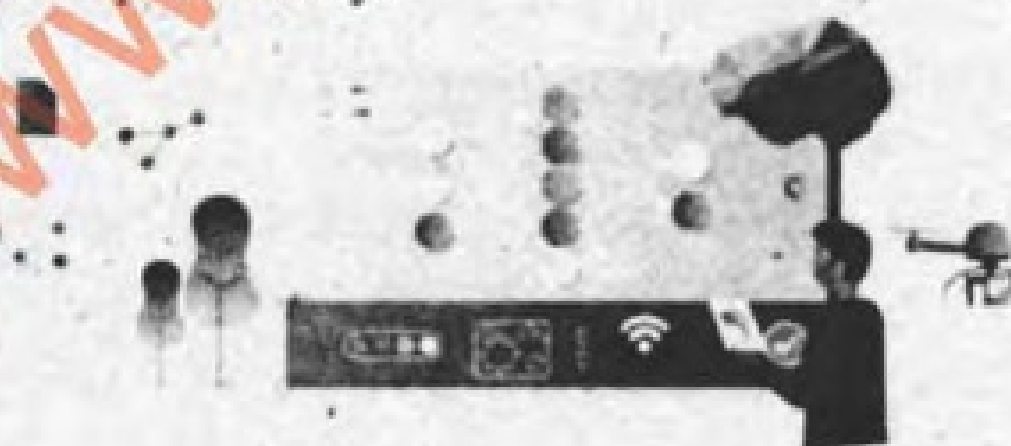
Answer: "Cybercrime refers to any illegal activity carried out using computers or the internet". OR "Cybercrime is a criminal activity carried out by means of computers or the internet". For example, Phishing Emails, Malware, Cyberstalking, Identity Theft, etc.



Q. 4: What constitutes ethical issues in digital environment?

Answer: Today we live in a digital world, and most of our relationships have moved online to chats, messengers, social media, and many other ways of online communication. There are many ethical issues in digital environment some of them are given below:

- Misuse of Personal Information.
- Misinformation and Deep Fakes.
- Autonomous Technology.
- Moral Use of Data and Resources.
- Lack of Oversight and Acceptance of Responsibility.



Q. 5: Discuss the advantages of medical assistance.

Answer: Medical assistance is also known as health assistance. Nowadays it is possible to consult and get advice from the specialist's doctors around the world in a real time situation via digital technology. We see that doctors are using computers to store patients' data, monitor progress and find cures. It is also used to examine the internal organs of human body and diagnose diseases.



Some Extra Questions/Answers

Q. Define ethics.

Answer: Ethics is a set of moral principles that govern the behavior of an individual or group of people.

Q. Define Computer Ethics.

Answer: It is the application of moral principles to the use of computers and the Internet. Examples include intellectual property rights, privacy policies, and online etiquette etc.

Q. Define ICT Ethics.

Answer: ICT Ethics deals with the procedure, values and practice that govern the process of using ICT and its related disciplines without damaging the moral values of an individual or organization.



COMPUTER SCIENCE NOTES FOR 7TH CLASS (FOR ISLAMABAD)

Q. Define Digital Plagiarism.

Answer: It is an act of copying and publishing another person's work without proper citation. It's like stealing someone else's work and releasing it as your own work.



Q. Define copyright law.

Answer: Copyright law understands an intellectual property right granted by the government that gives the owner exclusive rights to use the original expressive work with some limited exceptions.

Q. What is meant by digital civility?

Answer: Digital Civility is described as asserting and caring for one's own identity, needs, and values without demeaning those of others.

Q. What is a hacker?

Answer: A hacker is an individual with technical computer skills but often refers to individuals who use their skills to breach cybersecurity defenses.

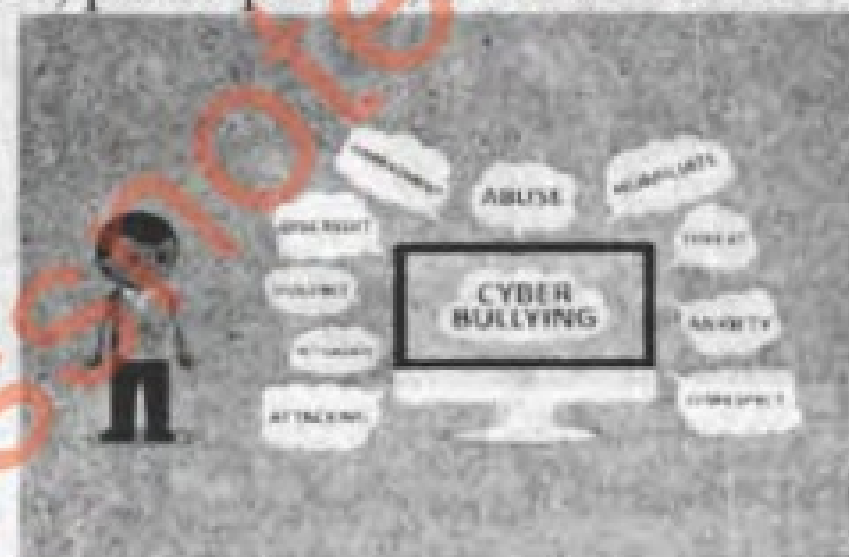


Q. What is meant by cyber ethics?

The term "cyber ethics" refers to a set of moral rules or a code of behavior applied to the online environment.

Q. Define cyberbullying.

Cyberbullying is bullying that takes place over digital devices like cell phones, computers, and tablets. Cyberbullying can occur through SMS, Text, and apps, or online in social media, forums, or gaming where people can view, participate in, or share content.



Q. Define money laundering.

Answer: Money laundering is the process of making transaction to hide actual source of money. Money can also be laundered through online auction and sales, gambling websites and even virtual gaming sites.



Q. Define cyber safety and security?

Answer: Cyber safety and security is the safe and responsible use of Information and Communication Technology (ICT). It aims to reduce the risk of cyber-attacks and protect against the unauthorized misuse of systems, networks and technologies.

COMPUTER SCIENCE NOTES FOR 7TH CLASS (FOR ISLAMABAD)

Q. What is the significance of ICT security?

Answer: Information and communication technology (ICT) security measures are necessary to protect confidential information from unauthorized use, modification, loss, or release. The three key elements of an effective ICT security system include monitoring and controlling access to confidential information.

Q. What is meant by Information Privacy?

Answer: Information privacy is the relationship between the collection and dissemination of data, technology, the public expectation of privacy, and the legal and political issues surrounding them. It is also known as data privacy or data protection.



Q. What is meant by malicious software?

Answer: Malicious software (often called malware for short) is any type of software that is intended to harm or **hack** the user. They might be attempting to steal your information, or they might simply do it for malicious reasons. Either way, it's not worth the time to wonder about the motivations of a hacker. Instead, it's



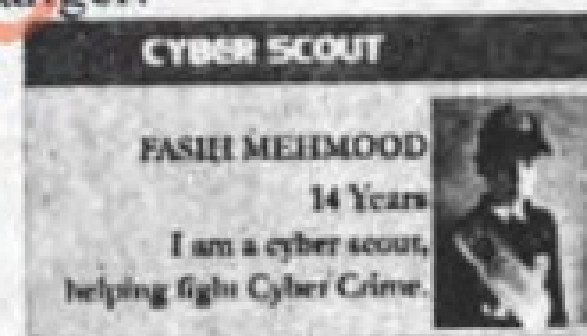
best to focus on questions that you might actually be able to answer.

Q. Why do you think cyber ethics are more important nowadays.

Answer: Cyber ethics are more important nowadays to protect personal & commercial information such as login & password info, credit card and account information and government and commercial databases. It also controls unwanted internet mail and ads (Spam).

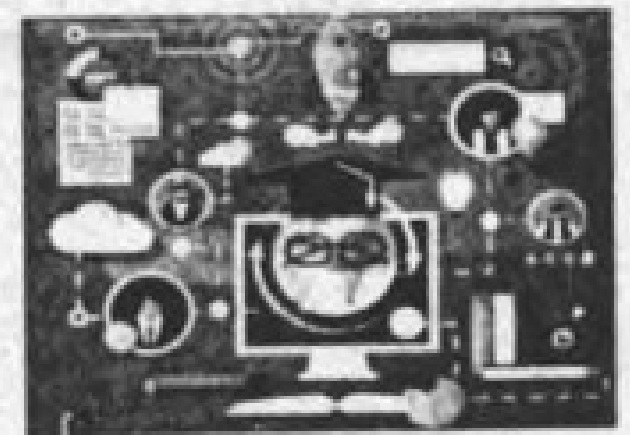
Q. What is meant by Cyber Scout?

Answer: Cyber Scout is a person with unique aim to promote awareness about cyber-crime in the society. A Cyber Scout is trained to identify cyber-crime activities, and equipped with adequate preventive knowledge to help fight this danger.



Q. Define online activities. List some of them.

Answer: Online activities refer to online products, services or information provided on the Internet. Some examples of major online activities are social networking, online games, online banking, online entertainment, online shopping etc.



Q. What is Pakistan's cyber laws and punishments?

Answer: Details regarding punishments for cybercrimes in Pakistan have been listed as under:

COMPUTER SCIENCE NOTES FOR 7TH CLASS (FOR ISLAMABAD)

Cybercrimes Punishments in Pakistan

Type of Cybercrime	Punishment
Data Damage	3 years imprisonment or PKR 3 lac fine
Electronic Fraud	7 years imprisonment or PKR 7 lac fine
Electronic Forgery	7 years imprisonment or PKR 7 lac fine
Malicious Code	5 years imprisonment or PKR 5 lac fine
Cyberstalking	3 years imprisonment or PKR 3 lac fine
Spamming	3 years imprisonment or PKR 3 lac fine
Spoofing	6 months imprisonment or PKR 50 thousand fine
Cyberterrorism	10 years imprisonment or PKR 10 million fine

Q. How to Report Cybercrime in Pakistan (National Response Centre for Cyber Crime)?

Answer: There is the following method / online portal to report cybercrime in Pakistan (National Response Centre for Cyber Crime).

Complete Registration Form

Q. Define social media.

Answer: Social media are interactive technologies that facilitate the creation and sharing of information, ideas, interests, and other forms of expression

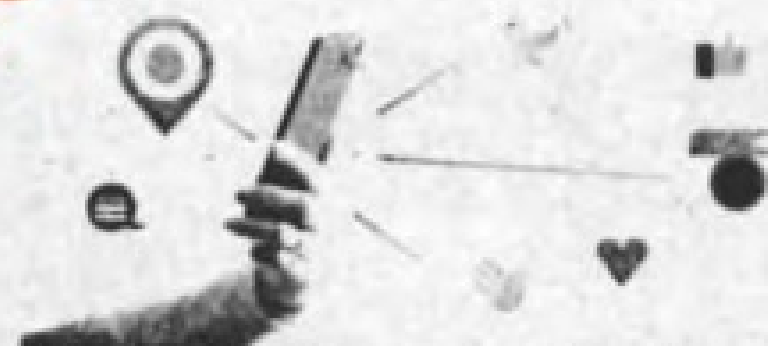
through virtual communities and networks.



Q. What are the positive impacts of social media?

Answer:

- People remain connected with family and friends all over the world.
- People can share their views and ideas with a large audience.
- Useful for social awareness and fundraising.
- Provide quick access to information.



Q. What are the negative impacts of social media?

Answer:

- Online interaction is reducing face to face socializing.
- It is increasing the use of cell phone.
- It can be used for cyberbullying.
- Personal information can become public through social media.

