Societal Impacts and internet Questions

Q1	. Rohan, a Class XII student, has written code for a website but is unsure how to make it available on the Internet. Explain to Rohan the role of a web server and web hosting in ensuring availability of his website on the internet.
Ans	Web Server : It is a computer software that accepts client request and responds with required content or error message. Web Hosting: It is a service that stores and maintains a website's files on a server so that the website is accessible online.
Q2	Explain the concept of VoIP and mention one benefit of using it.
Ans	VoIP allows voice communication over the internet. Benefit: Cost-effective
Q3	What is e-waste? Mention any one impact of e-waste on the environment
Ans	E-waste refers to discarded electronic devices like computers and phones. Impact: E-waste releases toxic chemicals into the soil and water, harming the environment.
Q4	Define digital footprints. Differentiate between active and passive digital footprints
Ans	Digital footprints are traces of a person's online activity. Active Digital Footprint: Intentional posts or uploads. Passive Digital Footprint: Unintentional data collected (e.g., location tracking).
Q5	Rahul has recently invented a new type of solar-powered water purification system and is concerned about the possibility of someone illegally copying and selling his invention without his permission. I. Explain Rahul the terms Intellectual Property & Intellectual Property Rights (IPR). II. Under which specific category of IPR is Rahul's invention covered? III. Describe the importance of IPR in safeguarding innovations?
Ans	I. Intellectual Property (IP) refers to creations of the mind like literary works, inventions etc. Intellectual Property Rights (IPR) are legal rights granted to creators for their original work. II. Rahul's invention will be covered under Patent. III. Intellectual Property Rights (IPR) protect innovations by granting creators exclusive control over their inventions, preventing unauthorized use and ensuring financial rewards, which encourages further creativity and economic growth
Q6	What are intellectual property rights (IPR), and why are they important in the digital world?
Ans	Intellectual Property Rights (IPR) These are legal rights that protect the creations of the human intellect. The nature of these works can be artistic, literary or technical etc. Importance in the digital world These rights help prevent the unauthorized use or reproduction of digital content and ensure that creators are fairly compensated and incentivized for their original work
Q7	What is Internet and how does it differ from World Wide Web (WWW)?
Ans	The Internet is a vast network of interconnected computer networks facilitating global communication and data exchange. The World Wide Web (WWW), on the other hand, is a system of interlinked hypertext documents accessed via the Internet.
Q8	Explain the concept of browser cookies and mention one advantage of using them.
Ans	Browser cookies: Small pieces of data stored on our digital devices by websites to remember information and personalize our experience. Advantage: Improve user experience by remembering preferences, like our preferred language and other settings.
Q9	Define the term Primary Key in a database. Explain how it is different from a Candidate Key.

Ans	Primary Key : A set of attributes that can uniquely identify each row in a table (relation). It must contain unique values and cannot be null. How it differs from Candidate Key There can be multiple Candidate Keys in a table (relation), but only one of them is selected as Primary Key
Q10	Mention two health concerns associated with excessive use of Digital Devices
Ans	Two health concerns due to excessive use of Digital Devices: a) Eye strain and vision problems. b) Musculoskeletal issues like neck and back pain.
Q11	Ayesha's family is replacing their old computer with a new one. They decide to throw the old computer in a nearby empty field/plot I. Explain any one potential environmental hazard associated with improper e-waste disposal. II. Suggest one responsible way to Ayesha's family for proper disposal of their old computer. III. Describe the importance of recycling in e-waste management.
Ans	I. E-waste can release harmful substances like lead and mercury into the environment. II. They can donate or sell it to a certified e-waste recycling center. III. Recycling e-waste helps conserve natural resources and reduces pollution.
Q12	Briefly explain the basic concepts of a web server and web hosting.
Ans	Web server: A web server is used to store and deliver the contents of a website to clients such as a browser that request it. A web server can be software or hardware. Web hosting: It is a service that allows putting a website or a web page onto the Internet, and making it a part of the World Wide Web.
Q13	Rati is doing a course in networking. She is unable to understand the concept of URL. Help her by explaining it with the help of suitable example.
Ans	URL: It stands for Uniform Resource Locator. It provides the location and mechanism (protocol) to access the resources over the internet. URL is sometimes also called a web address. It not only contains the domain name, but other information as well that completes a web address. Examples: https://www.cbse.nic.in, https://www.mhrd.gov.in, http://www.ncert.nic.in, http://www.airindia.in, etc.
Q14	Differentiate between the active digital footprint and passive digital footprints
Ans	Active Digital Footprints: Active digital footprints include data that we Intentionally submit online. This would include emails we write, or responses or posts we make on different websites or mobile Apps, etc. Passive Digital Footprints: The digital data trail we leave online unintentionally is called passive digital footprints. This includes the data generated when we visit a website, use a mobile App, browse Internet, etc.
Q15	Richa, recently started using her social media account. Within a few days, she befriends many people she knows and some that she does not know. After some time, she starts getting negative comments on her posts. She also finds that her pictures are being shared online without her permission. Based on the given information, answer the questions given below. i. Identify the type of cybercrime she is a victim of. ii. Under which act, she can lodge a complaint to the relevant authorities? iii. Suggest her any two precautionary measures which she should take in future while being online to avoid any such situations.
Ans	i. She is a victim of Cyber Bullying. ii. Information Technology Act, 2000 (also known as IT Act). iii. a. Need to be careful while befriending unknown people on the internet.

	b. Never share personal credentials like username and password with others.
Q16	Mention any three health hazards associated with inappropriate and excessive use of gadgets.
Ans	i) Eye strain ii) Painful muscles and joints iii) Poor memory iv) Lack of sleep v) Back pain and neck pain
Q17	Explain the terms Web page and Home Page.
Ans	Web Page: A Web Page is a part of a website and is commonly written in HTML. It can be accessed through a web browser. Home Page: It is the first web page you see when you visit a website.
Q18	Mention any four networking goals.
Ans	Four networking goals are: i. Resource sharing ii. Reliability iii. Cost effective iv. Fast data sharing
Q19	List any four benefits of e-waste management.
Ans	The e-waste management i. Saves the environment and natural resources ii. Allows for recovery of precious metals iii. Protects public health and water quality iv. Saves landfill space
Q20	Mention any four net etiquettes.
Ans	i. No copyright violation ii. Share the expertise with others on the internet iii. Avoid cyber bullying iv. Respect other's privacy and diversity
Q21	Nadar has recently shifted to a new city and school. She does not know many people in her new city and school. But all of a sudden, someone is posting negative, demeaning comments on her social networking profile etc. She is also getting repeated mails from unknown people. Every time she goes online, she finds someone chasing her online. i. What is this happening to Nadar? ii. What immediate action should she take to handle it? iii. Is there any law in India to handle such issues? Discuss briefly.
Ans	i. Nadar has become a victim of cyber bullying and cyber stalking. ii. She must immediately bring it into the notice of her parents and school authorities. And she must report this cyber crime to local police with the help of her parents. iii. Yes. The Information Technology Act, 2000 (also known as ITA-2000,or the IT Act) is the primary law in India dealing with cybercrime and electronic commerce.
Q22	What do you understand by plagiarism? Why is it a punishable offence? Mention any two ways to avoid plagiarism.
Ans	Plagiarism is the act of using or stealing someone else's intellectual work, ideas etc. and passing it as your own work. In other words, plagiarism is a failure in giving credit to its source. Plagiarism is a fraud and violation of Intellectual Property Rights. Since IPR holds a legal entity status, violating its owners right is a legally punishable offence. Any two ways to avoid plagiarism: □ Be original □ Cite/acknowledge the source
Q23	Rashi has just started using internet. Mention her any four net-etiquette which she should follow in order to become a good netizen.
Ans	Net-etiquette: □ No copyright violation □ Share the expertise with others on the web □ One should respect the privacy of others on the web □ One should respect the diversity of others
Q24	Mention any four communication etiquette, which one should follow while communicating on the internet.
Ans	Communication-etiquette:

	⍰ One should be precise in communication on the web ⍰ One should be polite in communication ⍰ One should respect the data limits ⍰ One should be credible
Q25	Briefly explain the term URL. Also give one example of it.
Ans	URL stands for Uniform Resource Locator. It provides the location and mechanism (protocol) to access the resource, available on the web. URL is sometimes also called a web address. Example: http://www.ncert.nic.in
Q26	Imagine a scenario where an individual, Alex, is concerned about his online privacy. Alex has a social media presence and frequently posts updates, photos, and comments on various platforms. Additionally, Alex frequently uses mobile apps and visits websites for shopping and information. a. Explain the concept of an active digital footprint, providing examplesfrom Alex's online activities. b. Describe the concept of a passive digital footprint and provide examples of how it is generated in Alex's online interactions. c. Discuss the implications of both active and passive digital footprints for Alex's online privacy and security.
Ans	**a.** Active Digital Footprint: Alex's active digital footprint includes actions like posting photos and comments on social media platforms, making his intentional online activities visible to others. **b.** Passive Digital Footprint: Alex's passive digital footprint is created when websites and mobile apps collect data about his browsing habits and preferences without his direct input, often for purposes like targeted advertising. **c.** implications of both active and passive digital footprints for Alex's online privacy and security: Alex's active digital footprint may expose him to privacy risks if he shares sensitive information publicly. His passive digital footprint, when mishandled, can lead to data privacy concerns and potentially put his personal information at risk, emphasizing the need for cautious online behaviour and data protection measures.
Q27	With reference to 3R's, describe three essential approaches to manage electronic waste. Also, provide practical examples of how individuals can actively participate in each approach.
Ans	1. Reduce: Individuals can minimise e-waste by making mindful purchasing decisions, such as buying longer-lasting electronic devices and only acquiring what is genuinely needed. For example, opting for modular smartphones with replaceable components can extend the lifespan of the device. 2. Reuse: Encouraging the reuse of electronic devices involves selling, donating, or trading-in old gadgets. For instance, individuals can refurbish and sell their old laptops to extend their use. 3. Recycle: To recycle e-waste responsibly, individuals can participate in ewaste recycling programs or drop-off centers. For instance, recycling old cell phones at designated collection points prevents them from ending up in landfills.
Q28	Smridh has recently changed his school so he is not aware of the people, but someone is posting negative , demeaning comments on his social media profile. He is also getting repeated mails from unknown people. Every time he goes online, he finds someone chasing him online. i. Smridh is a victim of ……. : a. Eavesdropping b. Stolen identity c. Phishing d. Cyber stalking
Ans	Answer(d)
Q29	The action that Smridh should take : a. He should ONLY share with his friends b. He should NOT share with anyone as it can cause serious problem c. He should immediately report to the police

	d. He should bring to the notice of his parents and school authorities.
Ans	Answer : d
Q30	iii. …….. is a set of moral principles that governs the behaviour of a group or individual and regulates the use of computers. a. Copyright b. Computer ethics c. Property rights d. Privacy law
Ans	**b. Computer ethics**.
Q31	Smridh needs to protect his personal information or data from unintentional and intentional attacks and disclosure which is termed as …….. a. Digital right b. Copyright c. Privacy d. Intellectual property
Ans	Answer : (c)
Q32	The act of fraudulently acquiring someone's personal and private information, such as online account names, login information and passwords is called as …… a. Phishing b. Fraud c. Scam d. Plagiarism
Ans	Answer : (a)
Q33	The school offers Wi-Fi to the students of Class XII. For communication, the network security-staff of the schoolis having a registered URL "schoolwifi.edu". On 17th September 2017, emails were received by all the studentsregarding expiry of their passwords. Instructions were also given renew their password within 24 hours byclicking on particular URL provided. On the bases of the above case study, answer the questions given below: i. Specify which type of cybercrime is it. a) Spamming b) Phishing c) Identity Theft d) Hacking
Ans	Answer: (b) Phishing
Q34	URL stands for_____ a) Universal Resource Loader b) Uniform Resource Locator c) United Research Loader d) Uniform Resource Loader
Ans	Answer: (b) Uniform Resource Locator
Q35	Unsolicited commercial email is known as: a) Malware b) Virus c) Spam d) Spyware
Ans	Answer: (c) Spam
Q36	WiFi stands for _____ a) Wireless Internet Frequent Interface b) Wireless Functioning c) Wireless Fidelity d) Wire Free Internet
Ans	Answer: c Wireless Fidelity
Q37	Ideally, what characters should be used in a password to make it strong? a) Letters and numbers only b) Mixed Case (Upper and Lower) c) Special characters d) All of above
Ans	Answer: (d) All of the above
Q38	Vidya Devi, a retired school principal, was inspired by her granddaughter who uses technology for her day to day activities. Being a learner and teacher all her life, she wanted to open an email account and interact with her friends and family. Her granddaughter created an email account for her and gradually she started sending mails to her friends and family. This was a big achievement for her. Her granddaughter explained how emails are sent, how to create an email address, what protocols are used. Some of these details were too technical for her, but she never gave up. There are few doubts/misconceptions in her mind which you can help her with. i. Unsolicited e-mail advertising is known as a. newsgroup b. junk ads c. spam d. none of the above
Ans	answer (c) spam
Q39	Which of the following is the correct format of email address? a. name@website@info b. name@website.info

	c. www.nameofwebsite.com d. name.website.com
Ans	answer: (b) name@website@info
Q40	Mail access starts with client when user needs to download email from the a. mail box b. mail server c. IP server d. Internet
Ans	Answer:(a) mail box
Q41	To use email service, one needs to register with a. Internet Service Provider b. Email Service Provider c. A company d. No need to register
Ans	Answer: (a) Internet Service Provider
Q42	Bcc stands for to send the copy of mail. a. Black carbon copy b. Blue carbon copy c. Blind carbon copy d. Block chain copy
Ans	Answer: (c) Blind Carbon Copy
Q43	Raman preet has to work on his science project which deals with electromagnetic waves. A lot of research work is required by him for the same. He uses Google Chrome to search for the relevant matter. i. Google chrome is an example of a a. Website b. Web browser c. Web Page d. Web Page
Ans	Ans. (b)
Q44	ii. He finally locates some useful information and clicks on the link provided to access the website. The link is actually known as a_____. a. Domain name b. Web Page c. URL d. IP address
Ans	Ans. (c)
Q45	As Raman preet works on his project, he collects and curates information. Whenever he clicks on the link the same piece of information is shown and the content is not clickable. Raman preet is accessing a/an _____ website. a. Dynamic b. Textual c. Outdated d. Static
Ans	Ans. (d)
Q46	A web cookie is a small piece of data that is _____ a. sent from a website and stored in user's web browser while a user is browsing a website b. sent from user and stored in the server while a user is browsing a website c. sent from root server to all servers d. sent from the root server to other root servers
Ans	Ans. (a)
Q47	HTML stands for_____ a. Hyper Text Markup Link b. Hyper Text Markup Language c. Hybrid Text Markup Language d. Hyper Text Manipulation Language
Ans	Ans. (c)
Q48	Sumit has to prepare a project on "Swachh Bharat Shreshth Bharat". He decides to get information from the Internet. He downloads three web pages (webpage1, webpage 2, webpage3) containing information on the given topic. 1. He read a paragraph on from webpage 1 and rephrased it in his own words. He finally pasted the rephrased paragraph in his project. 2. He downloaded three images of from webpage 2. He made a collage for his project using these images. 3. He also downloaded an icon from web page 3 and pasted it on the front page of his project report. Step1 An Example of _____ a. Plagiarism b. Paraphrasing c. copyright infringement d. Intellectual Property right
Ans	Answer:(b) :Paraphrasing
Q49	Step 2 An act of _____

	a. plagiarism b. copyright infringement c. Intellectual Property right d. Digital Footprints
Ans	Answer: (a) Plagiarism
Q50	Step 3 An act of _____ a. Plagiarism b. Paraphrasing c. copyright infringement d. Intellectual Property right
Ans	Answer : (c) Copyright Infringement
Q51	A website is a collection of _____ a. Web Servers b. Web pages c. Browsers d. Hyperlinks
Ans	Answer : (b)
Q52	The process of getting web pages, images and files from a web server to local computer is called a. FTP b. Uploading c. Downloading d. Remote access
Ans	Answer : (c) Downloading