

## **IT-Tools Assignment-1, FYIT Roll no: - 65 Prathmesh Pote**

1. Explain Green Computing with its advantages.

Ans:- Green computing is the environmentally responsible and eco-friendly use of computers and their resources. In broader terms, it is also defined as the study of designing, engineering, manufacturing, using and disposing of computing devices in a way that reduces their environmental impact. Green computing is also known as green information technology (green IT). Advantages of Green computing are:-

**1. Energy Savings** :- Apart from computers, there are different kinds of electrical appliances that consume significant amount of energy. This creates a demand for the energy production. Therefore, it is necessary to decrease this energy crisis as much as possible for making a more eco-friendly environment.

Green computing makes sure that very less amount of energy is consumed by the IT processes. Thus, this can save plenty amount of energy overtime.

**2. Cost Savings** :- Green computing is highly cost effective that helps people save money. Since lots of energies are saved when using a green computing solution, it also substantially leads to financial gains. Even though green computing is with high upfront costs, still it is cost effective in the long run.

**3. Recycling Process** :- Green computing encourages recycling process by reusing and recycling electronic wastes. Most parts of the computer are constructed using eco-friendly materials instead of plastic so that it can have less environmental impacts. This makes all the electronic wastes to get separated efficiently. Hence by implementing green computing strategies, companies overall can improve their recycling process.

**4. Brand Strengthen** :- Some customers are so well concerned about the environment that they are solely preferring to go with companies that support green computing. Green computing is capable of creating public images so that they can strengthen their brand and market position all around the world.

**5. Less Pollution** :- Through conventional computing, lots of pollution issues take place in the environment. For an example, if not properly recycled all the electronic wastes from the computer may end up circulating on land. Thus, leading to soil as well as water pollution. By using green computing, the users can minimize the impact created by pollution at least to some extent.

**6. GHG Emission** :- During the production of IT hardware, tremendous amount of green house gases are released to the atmosphere. Especially, since harmful gases such as carbon dioxide are emitted, it could lead to global warming. Hence, for lowering the amount of green house gases emitted, the production of hardware components must be reduced as well. This is how green computing works effectively.

**7. Chemical Exposure :-** In most of the electronic devices, harmful chemicals such as mercury is used. If a human happens to get contacted with those substances, he/she will probably suffer from health risks. Some of the known health risks are triggering of immune responses, nerve damage or even cancer. The companies which practice green computing potentially avoid the use of non-toxic substances during the production of computer hardware.

2. What is E-waste? What can be done to reduce the impact of E-waste?

Ans. E-waste is any electrical or electronic equipment that's been discarded. This includes working and broken items that are thrown in the garbage or donated to a charity reseller like Goodwill. Often, if the item goes unsold in the store, it will be thrown away. E-waste is particularly dangerous due to toxic chemicals that naturally leach from the metals inside when buried.

Following methods can be used to reduce impact of E-waste:-

1. Donate or Sell Working Electronics.
2. Consume Less in Order to Reduce Your E-Waste.
3. Use Your Old Mobile Phone as a GPS Device.
4. Recycle via a Retailer.
5. Check E-Cycling Centers in Your State.
6. Organize Your Electronics.
7. Know Your State's Laws About Battery Disposal.
8. Store Your Data Online.

3. What are the benefits of going paperless?

Ans:- The benefits of going paperless are as follows :-

1. Saves time. Time spent filing, organizing, and searching for paper documents is time that could be spent on more productive tasks.
2. Saves space.
3. Saves money.
4. Eases transfer of information.
5. Promotes the environment.
6. Boosts security

4. What is Github? Give advantages of using Github.

Ans :- Github is a provider of Internet hosting for software development and version control using Git. It offers the distributed version control and source code management functionality of Git, plus its own features.

Advantages of using Github are as follows:-

**1. It makes it easy to contribute to your open source projects**

Nearly every open-source project uses GitHub to manage their project. Using GitHub is free if your project is open source and includes a wiki and issue tracker that makes it easy to include more in-depth documentation and get feedback about your project. If you want to contribute, you just fork a project, make your changes and then send them a pull request using GitHub web interface.

**2. Documentation:** - By using GitHub, you make it easier to get excellent documentation. Their help section and guides have articles for nearly any topic related to git that you can think of.

**3. Showcase your work:** - Are you a developer and wishes to attract recruiters? GitHub is the best tool you can rely on for this. Today, when searching for new recruits for their project, most companies look into the GitHub profiles. If your profile is available, you will have a higher chance of being recruited even if you are not from a great university or college.

**4. Markdown:** - Markdown allows you to use a simple text editor to write formatted documents. GitHub has revolutionized writing by channeling everything through Markdown: from the issue tracker, user comments, everything. With so many other programming languages to learn for setting up projects, it's really a big benefit to have your content inputted in a format without having to learn yet another system.

**5. GitHub is a repository:** - This was already mentioned before, but it's important to note, GitHub is a repository. What this means that it allows your work to get out there in front of the public. Moreover, GitHub is one of the largest coding communities around right now, so it's wide exposure for your project.

**6. Track changes in your code across versions:** - When multiple people collaborate on a project, it's hard to keep track revisions—who changed what, when, and where those files are stored. GitHub takes care of this problem by keeping track of all the changes that have been pushed to the repository. Much like using Microsoft Word or Google Drive, you can have a version history of your code so that previous versions are not lost with every iteration.

**7. Integration options:-** GitHub can integrate with common platforms such as Amazon and Google Cloud, services such as Code Climate to track your feedback, and can highlight syntax in over 200 different programming languages.