ASSIGNMENT
IT TOOLS **PUNIT 39 FYIT**

1. **Explain Green Computing with its advantages.**

   Green Computing or Green IT is an ecofriendly approach that start with material selection & design to manufacturing until usage and disposal.
   Nowadays, everyone is using computing devices in one or another form and inefficient disposal causes huge e-waste generation which is harmful to the environment. Also data centers need an enormous amount of power to operate their severs for maintaining the data and the energy requirement have been growing steadily in recent years.

   Advantages of Green Computing :-

   1. Sustainable computing means reduced energy consumption that leads to reduced GHG emission and fossil fuel usage.
   2. Green computing is cost-effective due to less energy usage & cooling requirements.
   3. Sustainable IT helps in the preservation and effective utilization of natural resources.
   4. It encourages reuse and recyclability that will result in a lesser number of electronic wastes.
   5. Green IT uses non-toxic components which do not pose any health hazard to the end users.
   6. Green IT implementation helps in improving the public image of an individual or an organization

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

   Electronic waste or e-waste describes discarded electrical or electronic devices. Used electronics which are destined for refurbishment, reuse, resale, salvage recycling through material recovery, or disposal are also considered e-waste.
   The manufacturing of these devices and the use of rare materials that go into their production represent a huge source of embodied energy. Minimizing e-waste helps to conserve resources and reduces the amount of energy we take from the earth.

   1. **Re-evaluate**. Do you really need that extra gadget? Try finding one device with multiple functions.
   2. **Extend the life of your electronics**. Buy a case, keep your device clean, and avoid overcharging the battery.
   3. **Buy environmentally friendly electronics**. Look for products labeled Energy Star or certified by the Electronic Product Environmental Assessment Tool (EPEAT).
   4. **Donate used electronics to social programs**—and help victims of domestic violence, children safety initiatives, environmental causes, and more. Ask your student REP for a postage paid mailer for your cell phone or ink cartridge. For each item received, the World Wildlife Fund will receive one dollar.

5. **Reuse large electronics**. Post to Harvard's Reuse List
6. **Recycle electronics and batteries in e-waste recycling bins located around campus.** Large electronics can go in the larger bins found in your building.

3. What are the benefits of going Paperless.

1. PRODUCTIVITY
This is the most compelling benefit of going paperless in the workplace. Electronic documents are instantly and simultaneously available to everyone who needs them. That means fewer handoffs, less time lost in transit, reduced waiting times and less risk of loss or damage. Going electronic also offers the potential of rethinking workflows to save even more time and it improves teamwork because multiple people can work on documents at the same time.

2. COST SAVINGS
Those 10,000 sheets of paper each office worker uses cost more than $500. Multiply that by all the people in your workplace and add in the cost of printers, copiers, toner, fax machines and other devices that can be all but eliminated. The numbers get a little frightening. Then add on the cost of filing cabinets and people to maintain them. The Paperless Project estimates that every 12 filing cabinets require one full-time employee to maintain them. Now consider that the information in those 12 cabinets can today be stored in a device that fits in the palm of your hand. That's one reason AIIM says the ROI of going paperless is usually counted in months.

3. ACCESSIBILITY
Employees in paper-intensive businesses spend up to 40% of their time looking for documents, and 7% of documents are lost or misfiled. Multiply that by your payroll and compare it to the cost of that document imaging system you passed on last year because it was so expensive. And lost work time doesn't account for the many related soft costs, such as processing delays, customer frustration and postage. Compare the ease of a Google search to the chore of visiting a library to find information. That's the difference electronic processing makes. Digital access is also cheaper.

4. SECURITY
This might seem an odd benefit to mention considering the frequency of recent cyberattacks, but electronic documents are more secure than printed ones. For one thing, digital records can be rendered unreadable through encryption. They can also be secured against printing, copying and sharing. Access controls can specify viewing privileges to a fine level of granularity. Audit trails reveal who accessed what documents and when. In contrast, printed documents are only as secure as their proximity to a copy machine.

5. CUSTOMER SATISFACTION
Imagine how much happier your time-pressed customers will be when you can satisfy their requests in seconds instead of hours, or when you can send copies of the documents they request instantly via email instead of by express courier.

A reputable records management service provider can help you archive your paper documents efficiently and convert them to images or text files as you need. They can also help you design, install and implement a comprehensive electronic document management system to help you on your way to a digital future. Use Nov. 4 to wean yourself from paper and take the first step to going paperless in the workplace. You may find it addictive.

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

GitHub hosts your source code projects in a variety of different programming languages and keeps track of the various changes made to every iteration. So, the "Git" implies the version control system; a tool which allows developers to keep track of the constant revisions to their code.

1. It makes it easy to contribute to your open source projects :-
To be honest, 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. 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.

5. 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.

5. Write a program using PEP8 rules.

PEP 8, sometimes spelled PEP8 or PEP-8, is a document that provides guidelines and best practices on how to write Python code. It was written in 2001 by Guido van Rossum, Barry Warsaw, and Nick Coghlan. The primary focus of PEP 8 is to improve the readability and consistency of Python code.

However, you can use the benefits of Python only when you know how to express better with your code. Python was made with some goals in mind, these goals can be seen when you type import this.

```
# Functions 1
def func(x):
        a = x.split( ) [0]
        b = x.split( ) [1]
        return a, b
print ( func('Analytics Punit'))

# Function 2
def name_split(full_name):
    first_name = full_name.split( ) [0]
    last_name = full_name.split( ) [1]
    return first_name, last_name
print(name_split('Analytics Punit'))


# Outputs
('Analytics',  'Punit')
('Analytics',  'Punit')
```

ASSIGNMENT
IT TOOLS **PUNIT 39 FYIT**