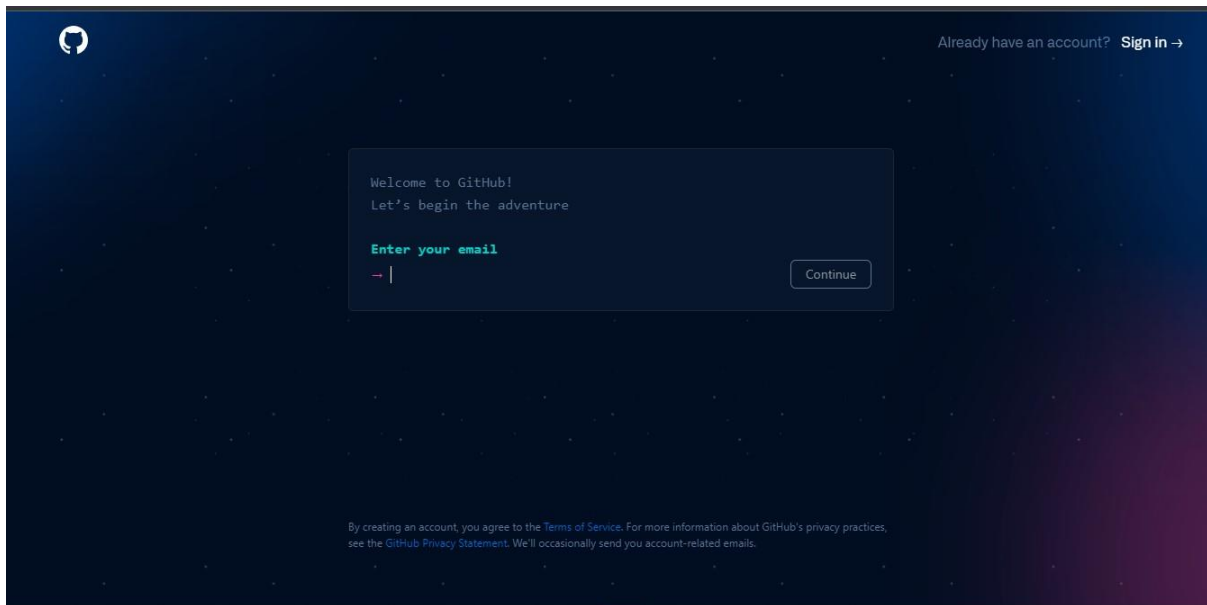


# IT TOOLS

## PRACTICAL 1

**Aim:-**Creating account, repository on GitHub and Cloning repository in GitHub Page.

**Step 1:-**Go go to github.com/click on Sign up/Enter the details

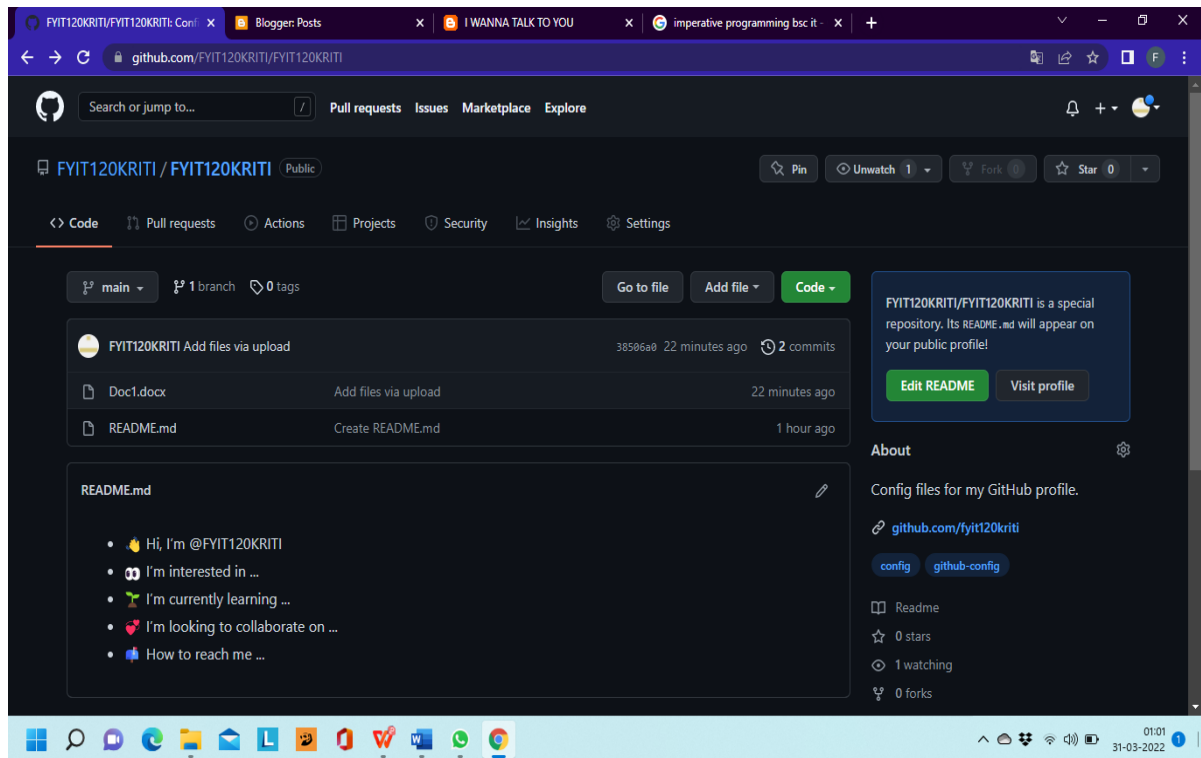


**Step 2 :-** Sign in/verify your email then you are all set for github.

**For creating repository:-**

**Step 1:-** Click on + button in the top right of the screen.

**Step 2:-** Click on new repository and u have created your repository.



Cloning a repository :-

Step 1:-Open the repository u want to clone Step

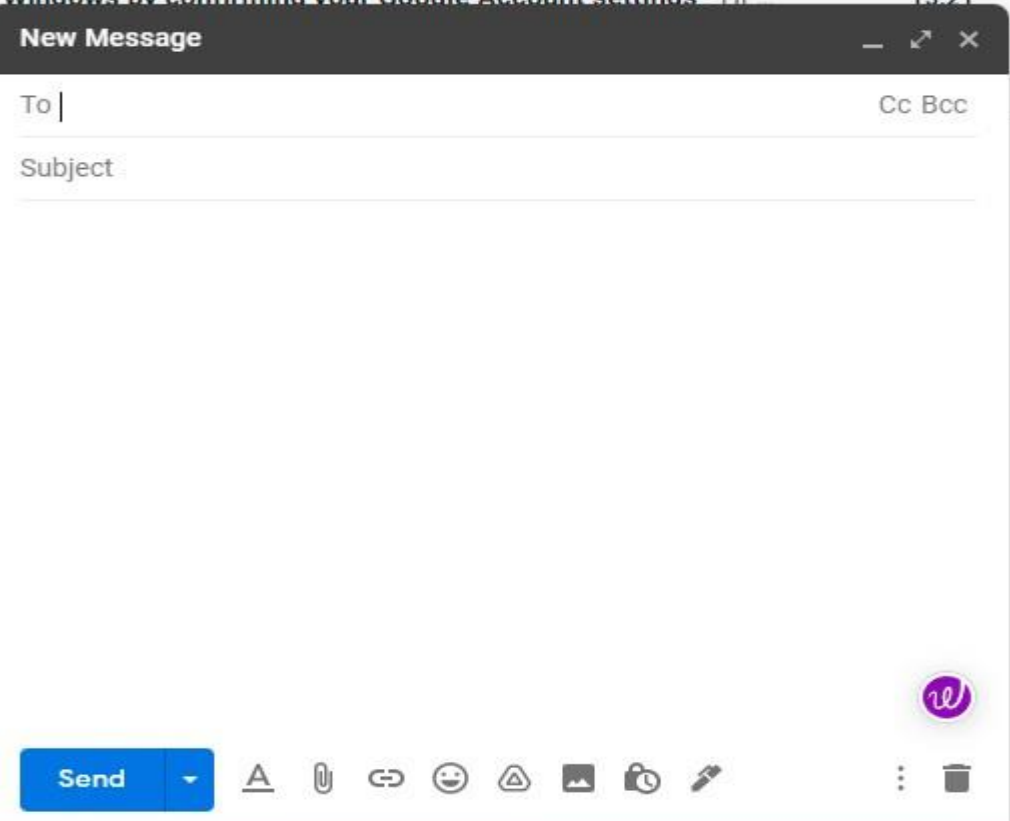
2:-Click on the Code, choose one of the 3

## **PRACTICAL 2**

Aim:-WRITING EMAIL

Step 1:-Open Your Gmail/gmail.com/login

Step 2:-Click on Compose at the top left under GMAIL.



The screenshot shows the Gmail 'New Message' compose window. At the top, there is a dark header bar with the text 'New Message' on the left and window control icons (minimize, maximize, close) on the right. Below the header, there are two input fields: 'To |' and 'Subject'. To the right of the 'To' field, the text 'Cc Bcc' is visible. The main body of the email is a large, empty white area. At the bottom, there is a blue 'Send' button with a dropdown arrow. To the right of the 'Send' button is a row of icons for text formatting (bold, italic, underline), linking, inserting a link, inserting a table, inserting a picture, inserting a video, and inserting a signature. On the far right of the bottom bar, there is a purple circular icon with a white 'v' and a trash can icon.

Step 3:-Write your mail

Step 4:-Click on send and the mail has been sent. You can also see your sent emails in the sent option in the inbox.

## **PRACTICAL 3**

Aim:-BASIC UNDERSTANDING ON FREE AND OPEN-SOURCE SOFTWARE

### **1)Describe Open-Source Software with Examples.**

Open source software (OSS) is software that is distributed with its source code, making it available for use, modification, and distribution with its original rights. Source code is the part of software that most computer users don't ever see; it's the code computer programmers manipulate to control how a program or application behaves. Programmers who have access to source code can change a program by adding to it, changing it, or fixing parts of it that aren't working properly. OSS typically includes a licence that allows programmers to modify the software to best fit their needs and control how the software can be distributed.

Some examples of OSS:-**Linux,python,android,chromium,etc.**

### **2)Describe Free Software with Examples.**

**Free software** (or libre software) is computer software distributed under terms that allow users to run the software for any purpose as well as to study, change, and distribute it and any adapted versions. Free software is a matter of liberty, not price; all users are legally free to do what they want with their copies of a free software (including profiting from them) regardless of how much is paid to obtain the program. Computer programs are deemed "free" if they give end-users (not just the developer) ultimate control over the software and, subsequently, over their devices

Some examples of Free Software:-**mozilla firefox,libreoffice,apache,etc.**

### **3)Difference between Free and Open-Source Software.**



Open Source	Proprietary
<ul style="list-style-type: none"><li>❑ Source code available to all</li><li>❑ License terms neutral</li><li>❑ Concise/straightforward license terms, easier compliance</li><li>❑ Some OSS license incompatibility between different OSS products</li></ul>	<ul style="list-style-type: none"><li>❑ Source code only available to vendor</li><li>❑ License terms favor vendor</li><li>❑ Lengthy/Complex license terms, tracking license compliance can be difficult</li><li>❑ License terms vary widely between PS vendors</li></ul>

## **PRACTICAL 4**

Aim:-INTRODUCTION and CONTRIBUTING TO WIKIPEDIA

a) What is Wikipedia?

- Wikipedia is a free online encyclopaedia featuring openly editable content created and sourced by users from around the world.
  - Wikipedia is a volunteer service, powered and maintained by a full-time staff and thousands of contributors who work for free.
  - Many facts on Wikipedia are supported by cited sources; however, Wikipedia is not considered reliable for research or other academic use.
  - Wikipedia offers a community hub where users can communicate and collaborate about shared interests, projects, and pages.
- 

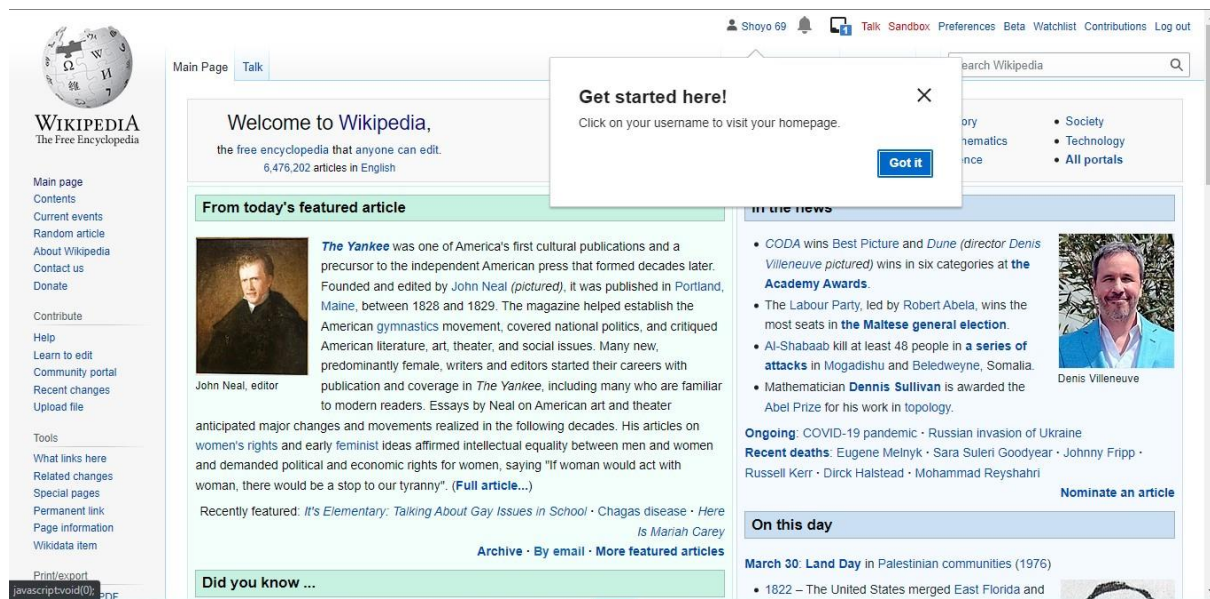
In short, Wikipedia is a multilingual, openly collaborative online information platform. Like the "wikis" that came before it, the online encyclopaedia's content is editable by volunteers from across the globe. Wikipedia has tens of thousands of editors, from issue experts to the casual fans, who can expand, delete, or change information at will. This allows for a wide array of information to be supplied and verified about a particular person, place, or thing.

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b) Steps to Create Account on Wikipedia

Step 1:-Go to [wikipedia.org](https://wikipedia.org)/click on create account in the top right corner.

Step 2:-Fill the details then login into wikipedia.



c) Creating Page on Wikipedia. Step 1:-Click on your profile

Step 2:-Click on talk to create your page

Step 3:-Put your content in and after finishing click on publish page

You can see that your page has been published and is viewable/editable with everyone .

D) Edit your page.

Step:-Click on Edit source in the top bar and edit the article and publish it again.

## **PRACTICAL 5**

**Aim:-**Using practical examples, describe green computing. List and explain the steps that you take to contribute to green computing.

**Green computing** is environmentally responsible and eco-friendly use of Computers. It is also defined by being the using and disposing of computing Devices in a way that reduces their environmental contact. With today's Powerful systems, not to mention the myriad of peripheral devices, the Home office is an area of the house where energy is wasted and lost. In the Following ways you can contribute to green computing at home:

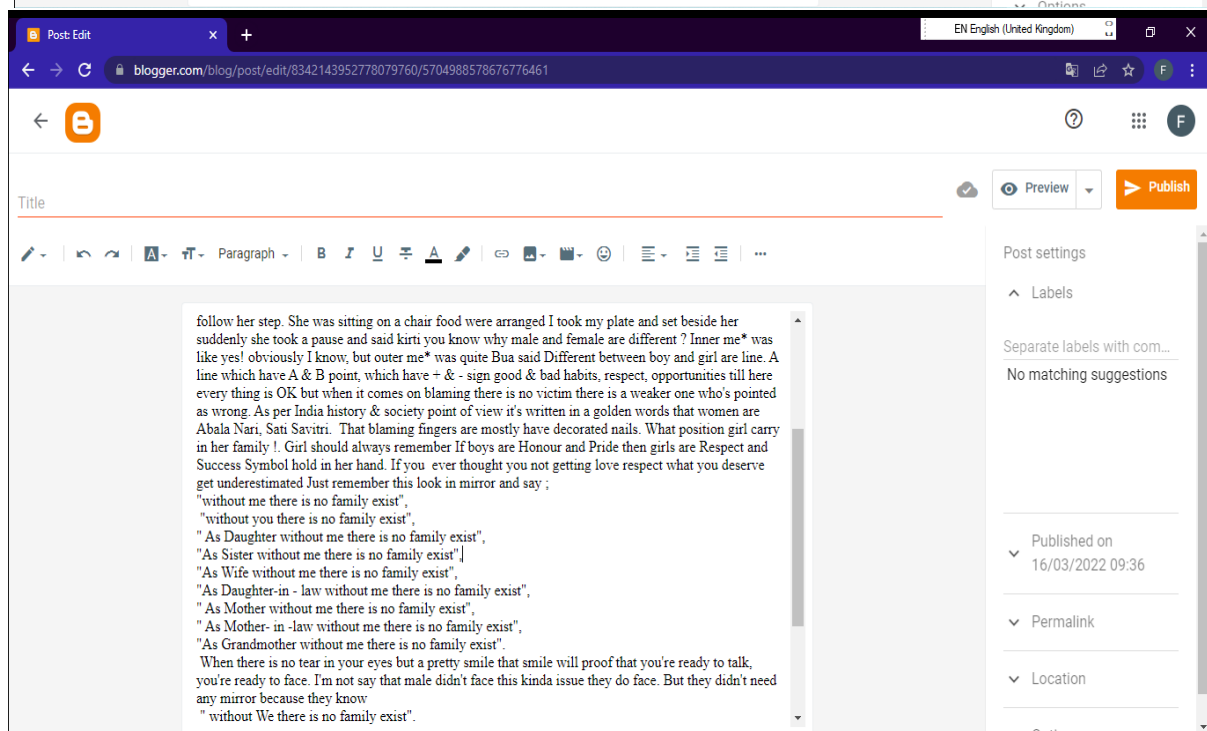
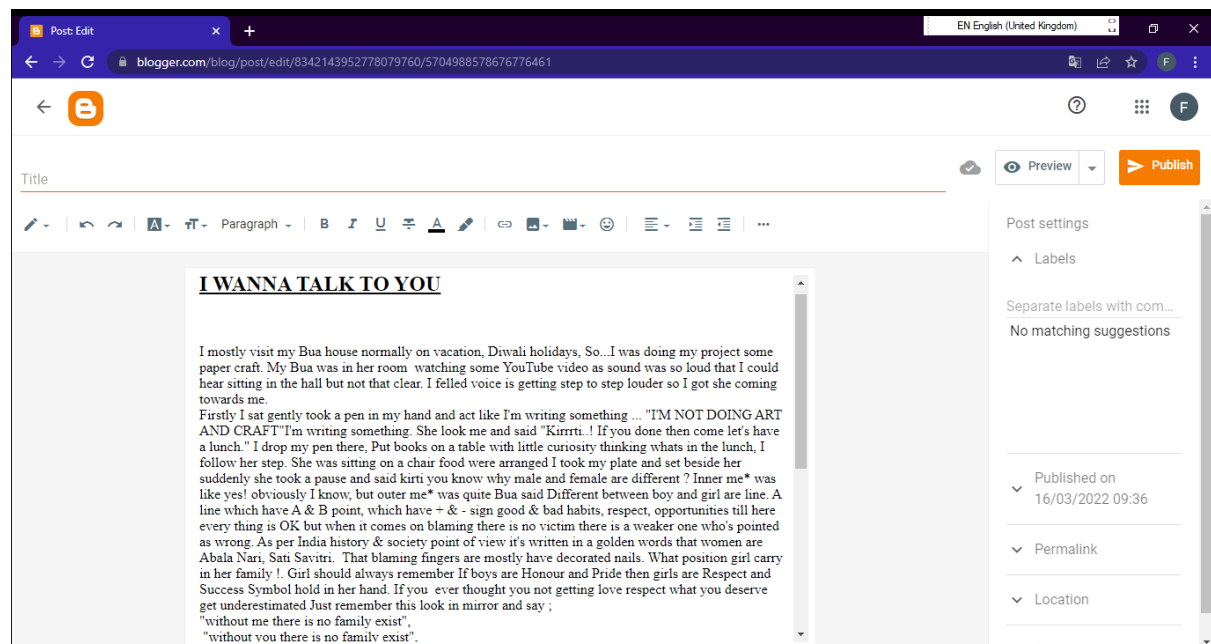
- 1) Power down when not in use Seems simple but many of us leave computers powered Up for a long time when not in use. A large sum of power is being wasted, so if you're Not using the computer press the power button to shut it off until needed. This can be Done even if the computer is working on something. Screensavers do not save power. The same goes for computers, you don't have to shut it down completely if you don't Want to reboot, just use sleep or hibernation mode. This will help save energy and Keep the system in its current state when you need it again.
- 2)Purchase energy-saving hardware If you don't need super-fast computing power then Look out for energy-efficient components when buying a new computer, such as green Hard drives and low-energy processors. While performance is slower and they can use Remarkably less power. Purchasing an energy-saving power supply unit for a can help the environment and save money, they're often quieter too.
- 3)Use the power-saving features All computers include power-saving options. Using These features you can command the computer to do various energy saving tasks. Automatically, including shutting off unused hard disks, powering off a monitor after A given time, or even placing the computer into sleep mode when not in use. This is Very useful on laptops to help preserve battery life.
- 4) Use a laptop instead of desktop. Laptops are much better for the environment than Desktop computers as they have components that require less power. If you don't need a desktop computer to consider buying a laptop instead, or if you have both, use the laptop as much as possible before considering the desktop.
- 5) Recycle responsibly Computer hardware is filled with different materials which can be Hazardous to the environment so make sure you dispose of old components Effectively . don't just throw broken technology in the bin.



# PRACTICAL 6

## AIM:-WRITING BLOGS

I have written a blog on one of my favourite TALK with the my bua.



Post: Edit

EN English (United Kingdom)

blogger.com/blog/post/edit/8342143952778079760/5704988578676776461

Title

Post settings

Labels

Separate labels with commas

No matching suggestions

Published on 16/03/2022 09:36

OneDrive

Screenshot saved

The screenshot was added to your OneDrive.

without me there is no family exist",  
 "without you there is no family exist",  
 "As Daughter without me there is no family exist",  
 "As Sister without me there is no family exist",  
 "As Wife without me there is no family exist",  
 "As Daughter-in - law without me there is no family exist",  
 "As Mother without me there is no family exist",  
 "As Mother- in -law without me there is no family exist",  
 "As Grandmother without me there is no family exist".  
 When there is no tear in your eyes but a pretty smile that smile will prove that you're ready to talk,  
 you're ready to face. I'm not saying that males didn't face this kind of issue they do face. But they didn't need  
 any mirror because they know  
 "without me there is no family exist".  
 I didn't realise she done with her meal keep her plate and she went back to her room. Till Bua was  
 speaking I didn't speak a word that kind of awkward I was so lost in thinking suddenly phone  
 ring she forgot her phone on table I try to take the call but time out as she was watching YouTube eeh  
 that video thumbnail title was "5 things that women should never forget". I got big smile on my  
 face. That really felt good she is not professionalist to say those words but no video can make me feel  
 that way her voice stuck in my mind her word.  
 Thank you  
 And one more thing my name is 'Kirti' not 'Kirti'  
 This is my cup of tea

## **PRACTICAL 7**

**Aim:-**Implementing coding practices in Python using PEP8.

The PEP is an abbreviation form of Python Enterprise Proposal. Writing code with proper logic is a key factor of programming, but many other important factors can affect the code's quality. The developer's coding style makes the code much more reliable, and every developer should keep in mind that Python strictly follows the order and format of the string.

Adapting a nice coding style makes the code more readable. The code becomes easy for the end-user.

PEP 8 is a document that provides various guidelines to write the readable in Python. PEP 8 describes how the developer can write beautiful code. It was officially written in 2001 by Guido van Rossum, Barry Warsaw, and Nick Coghlan. The main aim of PEP is to enhance the readability and consistency of code.

## **PRACTICAL 8:**

### **Importance of The Multidisciplinary Nature of Environmental Studies**

The word environment is derived from the French word ‘environner’ which means to ‘encircle or surround’. Thus our environment can be defined as “the Social, Cultural and Physical conditions that surround, affect and influence the survival, growth and development of people, animals and plants”. This broad definition includes the natural world and the technological environment as well as the cultural and social contexts that shape human lives.

EVS is a multidisciplinary academic field that is involved with the exploration, research, and expansion of an understanding of the living and physical environment. It also helps in a better understanding of the natural, political, technological, economic, social, and cultural aspects of environments. It can also be said that Environmental Studies or EVS is the science of physical phenomena in the environment.

The word ‘disciplinary’ means to have a disciplined study in a particular field. On the contrary, multidisciplinary refers to the combination of more than one discipline or field of study. It defines the multi-sectoral, and multi-dimensional study in various fields. For instance, when you study various subjects such as Science, Social Science, Mathematics, English, etc., then it is considered a multidisciplinary course of study.

What do you understand by the Multidisciplinary Nature of Environmental Studies?

Environmental Study is a vast subject to be studied upon. It has all the aspects of various subjects such as anthropology, science, social science, statistics, economics, computers, geology, health, and sociology. It illustrates the multi-sectoral and multi-dimensional study in various fields. It also educates us about the Physical, Social, Cultural, and Biological aspects.

It brings our natural environment and human impacts altogether. It is a multidisciplinary approach that deals with every issue that affects an organism. It covers the impacts of environmental science and social aspects of the environment as well.

Why is EVS known as the Multidisciplinary Nature of Environmental Studies?

Environmental Studies consist of different components. They are listed below:

- Anthropology – It is the study of human characteristics, their biological and psychological wellbeing, their societies and cultures, their development and evolution. EVS is related to anthropology as it deals with the study of humans and their environment as well across space and time.
- Biology – It is a branch of science that is concerned with the study of living organisms. It includes their physical structure, chemical processes, molecular interactions, development, and evolution. EVS is related to biology as it deals with the natural habitat of the living organisms.

- Chemistry – It is a branch of science that studies chemicals and the substances of which matter is composed of. In EVS, for the understanding of natural phenomena, we require knowledge of chemistry.
- Computers – With the advancing world, computers have become everyone's requirement. The Environmental Protection Agency uses computers to maintain a record and to investigate chemicals that are used in soil and water.
- Economics – It is a branch of knowledge that is concerned with the production, consumption, and distribution of goods and services. To protect the environment from pollution, global warming, and climate change, various economic policies have been developed in analysing and finding solutions or remedies for environmental issues.
- Geology – It is the study of physical structures and the substances that are present on earth, their history, and the processes they go through. EVS also deals with the study of the earth and the environment.
- Physics – It is a branch of science that studies the energy and matter in space and time and their relationship with each other. Physics works on energy conservation, atmospheric models, and various issues related to the **environment**.
- Sociology – It is the study of social life, social change, social causes, and the social consequences of human behavior. It also deals with the relationship between modern societies and the environment.
- Statistics – It is the study of collecting, analysing, interpreting, and presenting quantitative data. It is also used to analyze data to discover patterns and suggest the best growth of the environment.

### Importance of Multidisciplinary nature of Environmental Studies

Environmental Studies is essential as it helps us to understand our surrounding environment and natural phenomena. Numerous points provide us the importance of the Multidisciplinary nature of Environmental Studies. They are:

- It helps in gaining knowledge about the current environmental issues. It provides us with the necessary skills to obtain solutions for various environmental issues such as pollution, global warming, and climate change.
- It helps in maintaining the ecological balance through fundamental knowledge of environmental systems and processes.
- It provides us information about the changes in the environment due to anthropogenic factors. It also provides us the skills for analysing different environmental systems and changes in the environment because of human activities.
- It aims to preserve and protect biodiversity. It makes us familiar with the various species of flora and fauna. It provides us with different ways to preserve and protect them.
- It provides us the consciousness about our duties towards the environment. It additionally educates us about the various environmental issues which need to be resolved at a faster pace. Environmental issues such as conservation of energy, toxic emissions, water conservation, proper disposal of wastes, rising global temperature, and many more are also explained to us by environmental studies.
- Various more issues such as the depletion of natural resources, growing human population, rising numbers of natural calamities, for instance, earthquakes, tsunamis,

floods, drought, are all serious concerns that need to be taken seriously. EVS makes us understand the harmful and drastic effects of these issues on the environment, and humans as well.

- By studying Environmental Studies, people can explore and connect with their natural and surrounding environment. It helps people in developing their insights for understanding human processes, natural phenomena, and various changes in the environment.

#### What is the Scope of Multidisciplinary Nature of Environmental Studies?

The scope of Multidisciplinary Nature of Environmental Studies consists of various aspects such as biological, cultural, social, and physical. It is also related to other subjects such as science, geography, economics, statistics, health, technology, population, and ecology.

- Biological aspects – This is one of the most essential aspects of environmental studies. It is the solution of an organism, or a population, or a community to changes in its environment. Human beings, plants, animals, microorganisms, birds, insets are all included in the biological aspects.
- Cultural aspects – The environment gives knowledge about different customs, laws, dresses, values, and religious beliefs. They all are included under cultural aspects. Environmental studies help us in understanding these diverse aspects.
- Physical aspects – The environment which is shaped by human activities are considered as physical aspects, for example, bridges, roads, buildings, industries, etc. Apart from them, natural resources such as land, air, water, minerals, vegetation, landforms like hills, oceans, mountains, forests, etc.
- Social aspects – It illustrates the standard of living, tastes, preferences, educational status, and etiquettes of individuals living in society. Environmental Studies give acquaintance about people who have linguistic, cultural, and educational differences in societies.

#### How the Multidisciplinary Nature of Environmental Studies helps in solving environmental problems?

Environmental Studies deals with various areas – conservation of natural resources, controlling pollution, the impact of the growing human population on the environment. A multidisciplinary nature is required to address these complex environmental problems. These problems are connected with different sectors like agriculture, land degradation, economic loss, contamination of natural resources, forestry, habitat fragmentation, ozone layer depletion, solid waste management, etc.

The emerging climatic and environmental concerns need multidisciplinary solutions. Environmental issues are an alarming indication of upcoming disasters. Therefore, to gain knowledge about these issues, the Multidisciplinary Nature of Environmental Studies is a must.

There are various ways in which our environment can be conserved. Some of them are listed below:

- Replacing disposal items with reusable ones.

- Proper disposal of wastes
- Recycling of paper, plastics, etc.
- Neutralizing the poisonous emissions by the factories
- Conserve resources like water and electricity
- Support eco-friendly products more
- Afforestation and reforestation
- Enhancement of the use of public transport
- Limit the use of paper
- By spreading awareness about the importance of the environment

A pure, harmless, and pollution-free environment is every individual's right. These issues can be solved when people acquaintance with the need of conserving the environment. For this, knowledge of Environmental Studies is needed.

### Conclusion

EVS is a multidisciplinary academic field that is involved with the exploration, research, and expansion of an understanding of the living and physical environment. It has all the aspects of various subjects such as anthropology, science, social science, statistics, economics, computers, geology, health, and sociology. It brings our natural environment and human impacts altogether. Environmental Studies is essential as it helps us to understand our surrounding environment and natural phenomena.

It provides us with the necessary skills to obtain solutions for various environmental issues such as pollution, global warming, and climate change. It aims to preserve and protect biodiversity. Environmental Studies deals with various areas – conservation of natural resources, controlling pollution, the impact of the growing human population on the environment. Environmental issues such as conservation of energy, toxic emissions, water conservation, proper disposal of wastes, rising global temperature, and many more are also explained to us by environmental studies.

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## **PRACTICAL 9:**

### **Importance of Going Paperless**

“Going Paperless” is a term that was coined not so long ago to describe the processes of “reducing the amount of paper used in a business context, exchanging printed pages for digital documents especially in internal processes.”

Common paperless areas of choice by companies include receipts, invoices, tax returns and pay checks, among others. Areas that manual work adds no real value to the company and the steps required to have its work done are too time-consuming.

It should not be a surprise that, once this wave started, it was only a matter of time for it to become bigger. This happened mainly because of the rise of modern technology that is taking over companies worldwide, digitalising several processes that were previously made with tons of paper.

Seven reasons why going paperless may be beneficial for your small business:

#### **1. Document organization**

The ability to quickly locate and disseminate information may enhance your company's efficiency and professional image. Spending time hunting through piles of paper slows down response time in an age when most answers are only a few keystrokes away. By scanning electronic copies of receipts and invoices, documents can be sorted, filed, and organized for quick retrieval when it matters most.

#### **2. Client communication is faster and less expensive**

By maintaining a customer email list, you can instantaneously communicate sales and special offers without incurring postage and printing expenses. With the advanced technology of smart devices, most people have immediate access to emails. While it increases efficiency, electronic communication also decreases storage costs as the amount of paper copies littering your office will begin to dwindle.

#### **3. Paperless files are easily saved and retrieved on the go**

With the advent of photo-scanning apps, business travellers can easily back up expense reports without needing to save a pile of papers to bring back to the office. Electronic files can also be shared with co-workers over a network or via email. Shifting to paperless documentation also makes the transportation of data more efficient, without the need for cumbersome fax machines or document couriers.



#### 4. **Automatic backups**

When you accidentally throw out an important paper, it's usually gone forever. However, maintaining electronic files allows for multiple backup points. Data can be saved on flash drives, in the cloud, or to an external hard drive. For vitally important financial data, cloudbased accounting systems provide automatic backups on a pre-scheduled basis, which eliminates the need for small business owners to set aside time for manual backups.

#### 5. **Data security**

Customers will always be concerned about privacy and data protection, which requires companies to respond by implementing proper data security procedures beyond locked filing cabinets and paper shredders. Many of today's cloud-based accounting systems offer banklevel data security to protect financial and customer information, which is more than most small companies with limited technology staff can afford to build in-house.

#### 6. **Environmental friendliness**

According to the Environmental Paper Network's most recent State of the Paper Industry report, paper usage in North America is decreasing while the amount of paper recovered for recycling is increasing. Companies are striving to recycle, yet office copy paper alone still accounts for over 20 percent of the total paper usage in the United States. But being green is more than just reducing paper production. A paperless environment may also mean less energy consumption. Small businesses use less energy when printers, faxes, and copiers are inactive.

#### 7. **Financial benefits**

The savings of going paperless extends beyond just the cost of the paper, which can be substantial. The cost of other office supplies like ink cartridges also decreases. Additional upgrades or replacements to expensive office equipment such as copiers and fax machines may also decrease in a paperless office.

The shift toward a paperless environment increases each year as new technology becomes available to improve data storage and electronic communication. Taking action to reduce paper usage may help your business be more efficient and enhance the level of security that guards your most valuable information.

## PRACTICAL 10

: Define the terms renewable resource and non-renewable and give examples of each resource type that are related to forage production

A **natural resource** is something supplied by nature that helps support life. When you think of natural resources, you may think of minerals and fossil fuels. However, ecosystems and the services they provide are also natural resources. **Biodiversity** is a natural resource as well.

### Renewable Resources

**Renewable resources** can be replenished by natural processes as quickly as humans use them. Examples include sunlight and wind. Metals and other minerals are renewable too. They are not destroyed when they are used and can be recycled.

Wind is a renewable resource. Wind turbines like this one harness just a tiny fraction of wind energy.

Living things are considered to be renewable. This is because they can reproduce to replace themselves. However, they can be over-used or misused to the point of extinction. To be truly renewable, they must be used sustainably. **Sustainable use** is the use of resources in a way that meets the needs of the present and also preserves the resources for future generations.

### Non-renewable Resources

**Non-renewable resources** are natural resources that exist in fixed amounts and can be used up. Examples include fossil fuels such as petroleum, coal, and natural gas. These fuels formed from the remains of plants over hundreds of millions of years. We are using them up far faster than they could ever be replaced. At current rates of use, petroleum will be used up in just a few decades and coal in less than 300 years. Nuclear power is also considered to be a nonrenewable resource because it uses up uranium, which will sooner or later run out. It also produces harmful wastes that are difficult to dispose of safely.

Gasoline is made from crude oil. The crude oil pumped out of the ground is a black liquid called petroleum, which is a non-renewable resource.

Coal is another non-renewable resource.

One environmental issue that has been of prominent concern in the 20th century has been the growth in human population. The chart below, from the population reference bureau, illustrates the dramatic growth in human population beginning around the year 1750. As human population has grown the demand for resources of all kinds has also grown. Supporting more people means producing more food, which in turn requires greater amounts of energy, soil nutrients, water, and other resources associated with agricultural production

There are many types of resources that go into producing food and producing forages. In general these resources have been grouped into two types: renewable resources and nonrenewable resources. Renewable resources may be defined as resources that have the potential to be replaced over time by natural processes. The renewal process may be relatively quick, as with sunshine which comes on a daily basis. Or, the renewal process may be very slow, as in the formation of soil which may take hundreds of years. Non-renewable resources may be defined as resources whose stock or reserves is limited or fixed. The available supply of nonrenewable resources may be replenished through recycling (e.g. recycling aluminium cans), but the overall supply remains relatively constant. The table below gives several examples of each type of resource.

Examining the resources listed in the table above suggests that modern agricultural production, including forage production, is dependent on a number of resources that are considered nonrenewable. Farm equipment contains steel and aluminium parts and uses oil based fuels. The energy to manufacture fertilizer and other agrichemicals is derived from oil, coal, and natural gas. Phosphate fertilizers are widely used on crops. The realization of this dependence on nonrenewable resources has led to increased interest in developing and implementing so called sustainable agricultural production systems.