Q1. Differentiate between open source and free source.

Ans:-

Sr no	Open Source	Free Source
1	The name 'Open Source', the source code of the software is freely available for other people to see and study.	Free software is a stricter code sharing method compared to open source, which allows the maker of the code to specific certain conditions, to enable the legal use and distribution of the software.
2	Open source is a development methodology	Free software is a social movement.
3	It is focused to provide economical collaboration.	It is focused to provide moral collaboration.
4	It is very good for your business.	It is good for morality of society.

5	~~But~~ all ass comes under free software terminology	But all free software dasen't reme under open source software.
6	Examples: prime examples of open-source product are the Apache http server, the e-commerce platform, internet browsers, Mozilla, firefox and chromium and the full office suite libreoffice	Examples: The free software directory maintains a large database of free-software packages. Some of the best-known examples, linux kernel, the BSD and linux operating system; the GNU compiler collection and C library; the MySQL relational database; the Apache web server

Q2 Explain the significance of Green computing.

Ans:- When the news claimed that the environment was not a renewable resource, it really hit home and people started realizing that they had to do their part to protect the environment. Therefore, green computing is an important idea to keep our environment clean and safe. When it gets involved in recycling computer, it is difficult to dispose the old computer and some more that they take up much space in landfills. Somehow, the problems is that the electronic waste is increasing tremendously within this decade many negative effect are gradually showed up towards this environment, especially to human. Due to the quick obsolescence of electronics; it resulted a dreadful 70% of all hazardous waste. computer waste is high in many toxic materials such as heavy metals and flame-retardent plastic, which easily leach into ground water and bio-accumulate. In addition, to manufacture chips of the electronic requries huge amounts of resources and some deadliest gases and chemicals are used to man.

In an average year, 24 million computers have became obsolete in united state. only about 14% (3.3 million) of these all will be recycled or donated. over 20 million computer, the rest in U.S. will be get rid of, destroyed or shipped as waste product or to be dealt with latter in the temporary storage. we do not care about what happen when our laptop dies and just sbp to consider it.

The reality is that it either decomposed in a landfill or developing countries. The children there wrestling its components apart by hand and melting toxic bits to discover traces or valuable metal like Gold, silver etc.

Advantage of Green Computing.

1) Green computing technique reduces the energy consumpt which result into low carbon dioxide emission.

2) By using green computing techniques we can also sav money that was spent in extra usage of energy and resources.

3) Green computing also applies changing government policy to encourage recyling.

4) Green computing also removes the risk which is existing in the laptop such as chemical known to cause cancer or nerve damage etc.

5) Use preserve resources which use less energy ta produce use and dispose of product.

Disadvantages   of   Green   Computing

1) Green computing quite costly.

2) Some computer which are green may be considered as underpowered.

3) Fast technology chang-

Q3 What is GitHub? Explain the advantages of using Github. Give steps of creating and cloning respository on Github.

Ans:- Github is a web-based interface that uses Git, the open source version controrol software that lets multiple people make separate changes to both web pages at the same time. As carpenter notes, because all it allows for real-time collaboration, GitHub encourage teams to work together to build and edits their site content.

GitHub founded on 2008, Headquartes is in San Francisco, California, united States
CEO: Thomas Dohmke
FOUNDERS: Tom preston-werner, Scott chacon, Chris Wanstrath, P.J. Hyett
Parent organization: Microsoft corporation.

Advantage of using GithHub.

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

2) Documentation: By using GithHub, you make it easier to get excellent documentation.

3) Markdown allows you to use a simple text editor to write formatted - document. GitHub has revolutionized writing by channeling everything through markdown.

4) GitHub is a repository :- It allows your work to get out ~~them~~ there in front of public.

5) Track change in your code across version.

Creating and cloning respository on GithHub

Step1 :- On GitHub.com, navigate to the main page of the respository.

Step 2 :- Above the list of files click Code

[code]

Step 3 :- To clone the respository using HTTPS, under "clone with HTTPS", click. To clone the respository using an SSH Key, including a certificate issued by your organization's SSH, then click To clone a respository using GitHub CLI, click use GitHub CLI.

Step 4: open Git Bash

Step 5: change the current working directory to the location where you want the cloned directory.

Step 6 : Type git clone, and then paste the URL.
you copied ~~earlier~~ earlier.

Step 7 : press enter to create your local clone.

S4. Differentiate between tools and teachnologies.

Ans :- • Teachnologies, are system imposed by the organization that often constrain, disempower and depersonalize knowledge work.

• Tools are extension of our hands, as much as the hammers or knives of traditional work. They reinforce ownership, craftmanship, stewardship and professional identity

In simple word, how to do it ? → technology

which thing will help you to do it ? → tools

• Technology is basically the discipline that deals with the art and science of applying scientific insight to enhance and streamline the process of manufacturing and producing a particular item. Also, teachnologies are to achieve certain long-term goals within a particular organization.

• Basically, a tool can be anything digital or manual as well. for examples, when a professional essay writer uses application such as referencing generator and word count tools to perfect the paper, then the resources used. are termed as 'tools'.

Types of technology :

- Information teachnology
- Networks
- Internet of things
- Entertainment and media teachnology
- medical teachnology
- Science and space technology

Types of tools

- lux
- 7-zip
- foxit reader :
- Basecamp
- Workzone

- The technology is essential knowledge upon which tools are made.

   For examples :

   A spiraled inclined plane is a technology. The screw is a tool making use of the teachnology.

   An integrated circuit is a technology. The microchip is tool making of the technology.

   Asymmetric cryptography is the technology and TLS is a tool making use of the technology.

Harsh Yadav
FYIT 97

S5. Explain the features and working of any tools used in online teaching and learning process

Ans :- <u>Google forms</u>

One of the best ways to engage all student in your classroom is to give students an easy (and even anomymous) way to ask question, receive feedback, or otherwise reach out to the teacher - while there are many ways to do this, one of the most universally accessible (and free) methods is Google forms

Google forms started life as a google sheet feature in 2008, two year after sheets' original launch. we can add a form to a spreadsheet, format in a seperate sheet, and see your form responses

Developers	Google
Platform	Web application
Type	Survey
Website	docs.google.com Forms

Features :-

1) Menu search, shuffle of question for randomized order, limiting responses to once per person, shorter URLs, custom themes

2) Automatically generating answer suggestion when creating forms

3) "Upload file" option for users answering question that require them to share content or files from their computer or google drive.

4) In setting, user can make changes the affect all new farms, such as always collecting email address.

Step to create google forms.

Step 1: Go to http://docs.google.com/forms

Step 2: create form click on blank start creating

Step 3: Adding question and options

Step 4: After creating click on send and share forms link