:: Important Questions from Open Source ::

1. What is OSS?
   Ans. Open Source Software means the source code of an OSS is open for all. It can be copied, modified and redistributed. It can be offered free with nominal development charges.

2. What is Freeware?
   Ans. It generally refers to the software which is available for free of cost. The end user has no restrictions on copying or redistribution, but the user cannot modify the software, because the source code is not available.

3. What is Shareware?
   Ans. Those software which is made available with the right to redistribution copies. The objective of shareware is to make software available to as many users as possible, but certain period of license fee is to be paid.

4. Mr. Deepak is confused between the terms domain name and URL. Explain the difference with the help of a suitable example.
   Ans. URL Stands for Uniform Resource Locator. It is the complete address of a document on the web, whereas a domain name specifies the document's web server.
   Eg. www.yahoo.com/ - Domain name and the complete address of the file or location.

5. What is FOSS?
   Ans. It stands for Free and Open Source Software which we get free of cost, get copied, modified, and redistributed and with the availability of its source code.

6. What is FLOSS?
   Ans. It stands for Free/ Liberal/ Open Source Software it is same as FOSS.

7. What is Open Office?
   Ans. It is Open Source software (Office Suite) for Word Processing, Spreadsheets, Presentations, and Databases etc. It is available in many languages. It stores files in Open document format (ODF). This Software is free to download and use, no key or license is required to run the software.

8. Mr. Shyam is confused between Shareware and Open Source Software. Mention at least two points of differences to help him to understand.
   Ans. Shareware: One can download and try shareware for free. But to use it one need to buy the software or pay for it.
   b. User can not modify the source code or there is no access to the source code of the software also.
   Open Source: Means the source is available to all the potential users, they are free to use, modify and redistribute the software and its source code.
   b. Exclusively the source is free to use but services, support, documentation and the binary version may be not free.

9. What is Proprietary Software?
   Ans. The Source code of the software if not freely available. It is not open source, but it is regulated and distributed with the special permission of the supplier or the vendor or proprietor.

9. Write the full form of the following.
   1. OSS : Open Source Software
   2. FSF : Free Software Foundation
   3. W3C : World Wide Web Consortium
   4. OSI : Open Source Initiative

10. What is Character Encoding?
    Ans. It is a system consists of a code that associates each character from a given system with something else, such as a sequence of natural numbers, binary numbers or electrical pulses in order to facilitate the transmission of data through different networks.

11. What is Ogg Vorbis?
    Ans. Vorbis is a new audio compression format developed by Xiph Org. It is an Open, Patent free, professional software for audio encoding and streaming technology with all the benefits of Open Source.
12. What is Unicode?
    Ans. It is an industry standard allowing computers to consistently represent and manipulate text expressed in most of the world's writing systems.

1 (a)	Answer the following questions: **What is the difference between Star Topology and Bus Topology of network?**
Ans.	**Bus topology:** All devices are connected to a central cable, called the bus or backbone. Bus networks are relatively inexpensive and easy to install for small networks. Ethernet systems use a bus topology. **Star topology:** All devices are connected to a central hub. Star networks are relatively easy to install and manage, but bottlenecks can occur because all data must pass through the hub
(b)	**What is the full form of the following** **i) FTP ii)RSS iii) TTF iv) GNU v) FLOSS vi)JDBC**
Ans.	FTP: File Transfer Protocol RSS: Really Simple Syndication TTF: True Type Font OSI: Open Source Initiative FLOSS: Free Libre and Open Source Software JDBC: Java Data Base Connectivity
(c)	**What to you understand by Domain resolution?**
Ans.	Internally computer follows a mechanism to obtain IP address of a website from a URL. This mechanism is known as Domain Name Resolution
(d)	**What are the facilities provided by the SERVER in a network environment?**
Ans.	Facilities provided by the SERVER in a network environment are as follow- • Resource Sharing • Centralized database storage • Internet Sharing with authentication • Account Monitoring
(e)	**Explain the following terms:** **i) Linux ii) FSF**
Ans.	**Linux** – Linux is a popular operating system. It is an example of free software and open source development. It is not freely available for use, but also its code is freely available for use and modification and fro redistribution. It was originally written by Linus Trovals. **FSF** – FSF stands for Free Software Foundation. FSF is a non-profit organization created for the purpose of supporting free software movement. Richard Stallman founded FSF in 9185 to support GNU project and GNU licenses.
2 (a)	**What is e-Learning?**
Ans.	e-Learning is the delivery of a learning, training or education program by electronic means.E-learning can be CD-ROM-based, Network-based, Intranet-based or Internet-based in some way to provide training, educational or learning material. e-learning allows you to learn anywhere and usually at any time. It can include text, video, audio, animation and virtual environments.
(b)	**Explain any two major projects of E-Governance in India.**
Ans.	The 2 major projects of E-Governance in India are: **1. DRDO:** It is a network of more than 50 laboratories which are engaged in developing defence technologies covering various disciplines like naval system, special materials, advanced computing etc.

Expand the terms: OSI, FLOSS, FSF, GNU, GPL W3C, and OSS.

1. **OSI** –Open source Initiative
2. **FLOSS** –Free Libre and Open Source Software
3. **FSF** –Free Software Foundation
4. **GNU** –GNU is Not Unix
5. **GPL** –General Public License
6. **W3C** –World Wide WEB Consortium
7. **OSS** –Open Source Software

Define Freeware and Shareware.

1. **Freeware:** Freeware is the software available free of cost and allows copying and further distribution but does not allows modification as its source code is not available.
2. **Shareware:** Shareware is as software which is available for redistribution for stipulated time but after some time some license free is required to be paid.

What for are these software used?

(i) Linux
(ii) Mozilla Firefox
(iii) PHP
(iv) Python
(v) Apache
(vi) MySQL.

(i) Linux: Linux is used as an operating system.

(ii) Mozilla Firefox: Mozilla is a free, cross-platform, Internet software suite that includes a web browser, an email client, an html editor and an IRC client.

(iii) PHP: PHP is widely used open source programming language primarily for server side applications and developing dynamic web content.

(iv) Python: Python is a programming language. This language has syntactic simplicity, flexible typing and interactive interpreter. It is used in both industry and academic for a wide variety of purposes.

(v) Apache: Apache is an open source web server available for many platforms such as Microsoft Windows, UNIX, Linux, BSD etc.

(vi) MySQL: MySQL is an open source, multithreaded, multiuser, SQL relational database server.

What is openoffice.org?

It is office an application suite which is free software and directly competes with Microsoft Office. It is compatible with MS Operating System, UNIX, and MAC OS.

What is openoffice.org?

It is office an application suite which is free software and directly competes with Microsoft Office. It is compatible with MS Operating System, UNIX, and MAC OS.

What is standard?

A standard is an established set of rules by are cognized body and are widely used across various platforms.

Name two categories of standards.

1. **Proprietary Standard:** Is a standard for which the user has to buy a license.
2. **Open Standard:** Is a standard that is publicly and freely available without any restrictions.

Which of the following are open standards?

.orgg .DOC .SVG .TTF .JPEG

.SVG
.JPEG

Compare and Contrast

(i) Free software and Open source software
(ii) OSS and FLOSS
(iii) Proprietary software and Free software
(iv) Freeware and Shareware
(v) Freeware and Free software

(i) Free software and Open software

compare	contrast
✓ Have the source code available, to see how it works and change it.	✓ Free software allows you to modify and release the change to the program. ✓ Whereas, Open source software restricts you to release source code commercially, or release modified copies of the binaries/source.

(ii) OSS and FLOSS

compare	contrast
✓ In Both OSS and FLOSS source code is available to customers and it can be modified and redistributed without any limitation.	✓ An OSS may come free of cost or with a payment of nominal charges that its developers may charge in the name of development and support of software. ✓ Whereas, FLOSS (Free Libre and OSS) is both free software as well as OSS.

(iii) Proprietary software and free software

compare	contrast
✓ Both have owners but they have different conditions for distributing their software.	✓ Proprietary software is the software that is neither open nor free available. ✓ Whereas, free software is free to use, modified and distribute etc as its source code is available free.

(iv) Freeware and Shareware

compare	contrast
✓ Both cannot be modified.	✓ Freeware Software that are available at no cost but cannot be modified. ✓ Whereas, shareware software for which license fee is payable after some time limit.

(v) Freeware and Free software

compare	contrast
✓ Both the type s of software are freely available.	✓ Freeware Software that are available but cannot be modified. ✓ Whereas, free software can be modified due to availability of source code

Write short note on:

(i) GNU
(ii) Linux
(iii) Mozilla
(iv) Apache
(v) PostgreSQL
(vi) Python
(vii) PHP

(viii)	**Open Office**
(ix)	**OSI**
(x)	**Tomcat**
(i)	**GNU:** The acronym for GNU is GNU is Not Unix. GNU's design is Unix-like, but differs from UNIX by being free software and containing no UNIX code. It includes wide range of software, including applications apart from operating systems. This is developed by Free Software Foundation (FSF).
(ii)	**Linux:** It is popular operating system and originally was used to refer to the kernel of O/S. it is the most common example of free software because it is freely available with source code. so that anyone can use it, modify it and redistribute it. Linux can be downloaded from www.linux.org. Linux is a part of popular Web server set of program-LAMP (Linux, Apache, MySQL and PHP). Linux was originally developed for Intel 386 microprocessors and now support all popular computer architectures.
(iii)	**Mozilla:** The Mozilla Application Suite (originally Known as Mozilla, marketed as the Mozilla Suit, and code named SeaMonkey) is a free, cross-platform internet suite, whose components include a web browser, an e-mail and news client, an HTML editor, and an IRC client. Its development was initiated by Netscape Communications Corporation, before their acquisition by AOL. It is based on the source code of Netscape communicator. The development was spearheaded by the Mozilla Organization from 1998 to 2003, and by the Mozilla Foundation since 2003.
(iv)	**Apache:** Apache web server or Apache HTTP server is an open source web server available for many platforms such as BSD, Linux, Unit System, Microsoft Windows and other platforms. Apache web server is developed and maintained by an open community of developers under the auspices of Apache Software Foundation. Apache is the web server component of the popular web server set of programs – LAMP (Linux, Apache, MySQL, and PHP). It can be downloaded from www.apache.org.
(v)	**PostgreSQL:** PostgreSQL is a free software object-relational database server (database management system), released under the flexible BSD-style license. It offers an alternative to other open-source database systems (such as MySQL and Firebird), as well as to proprietary systems such as oracle, Sybase, IBM's DB2 and Microsoft SQL Server.
(vi)	**Python:** Python is a programming language. This language has syntactic simplicity, flexible typing and interactive interpreter. It is used in both industry and academic for a wide variety of purposes. Python uses far fewer symbols than languages like Java and C. for example, blocks inside loops and IF statements are indicated by indentation rather than curly braces ({}), and the end of a line does not have a semicolon.
(vii)	**PHP:** PHP stands for "**P**HP: **H**ypertext **P**reprocessor". PHP is a server-side scripting language for creating dynamic Web pages. It is an open-source programming language which helps to develop server-side application and dynamic web content. PHP allows easy interaction with a large number of relational database systems, such as MySQL, Oracle, DB2, and PostgreSQL, while maintaining a simple and straightforward syntax. PHP runs on most major operating systems, including UNIX, Linux, Windows, and Mac OS X, and can interact with many major web servers.
(viii)	**Open Office:** Open office is a free and open source office suite. OOo was developed to create a leading international office suite which will run on all major platforms and provide access to all functionality and data through open-component based APIs and an XML-based file format. It includes a word processor, spreadsheet, presentation, vector drawing and database components.
(ix)	**OSI:** OSI stands for Open Source Initiative. This is an organization which is dedicated to promote open source software. OSI is founded by Bruce Perens and Erics Raymond in Feb 1998. OSI defined the term and specification of open source software.
(x)	**Tomcat:** Tomcat is a web server that supports servlets and JSPs. Tomcat comes with the jasper compiler that compiles JSPs into servlets. Tomcat started off as a servlet specification implementation by James Duncan Davidson who worked as a software architect at sun. The initial Tomcat release appeared with versions 3.0.x. tomcat 5.5.x, the latest production quality release as of 2005, implements the Servlet 2.4 and JSPO 2.0 specifications.