WEB TECHNOLOGIES

1) **What is a web client?**

   A web client refers to the web browser in the user's device or mobile device

   Example - Chrome web browser, Opera web browser, Internet explorer

2) **What is a webserver?**

   - A web server is a computer that runs websites.
   - A basic objective of the webserver is to process and deliver web pages to the user
   - This intercommunication is done using HTTP

3) **What is HTTP?**

   - HTTP stands for HyperText Transfer Protocol
   - It is a client-server protocol that allows the fetching of resources, such as HTML document
   - A website that uses HTTP has http:// in its URL

4) **What is HTTPS?**

   - HTTPS stands for HyperText Transfer Protocol Secure
   - HTTPS is HTTP with encryption
   - HTTPS uses SSL to encrypt normal http request and response
   - A website that uses HTTPS has https:// in its URL

5) **What is XML?**

   - XML stands for Extensible Markup Language
   - XML was designed to store and transport data
   - XML plays an important role in many different IT systems

6) **What is JSON?**

   - JSON stands for JavaScript Object Notation
   - JSON is a lightweight format for storing and transport data

7) **What is a web application?**

   - A web application is a computer program that uses a browser to perform particular functions
   - The web application is a client-server program. That means it has a client-side and server-side

- Web applications are present on many websites

    Example - Contact form on a website

8) What is the desktop application?

- The desktop application is a software program that can be run on computers to perform a specific task

    Example - Word, Excel, Paint

9) What is web designing?

- Web design refers to the design of websites that are displayed on the internet
- It is usually referred to the user experience aspects of website development
- Web design used to be focused on designing websites for desktop browsers

10) What is web development?

- Developing the website for the internet is called web development
- There are three types of web development
    - Front-end development
    - Back-end development
    - Full-stack web development

11) What are the technologies used in web development?

- HTML
- CSS
- JavaScript
- Ajax
- Jquery

12) What are the major tags in HTML?

- **<html>**
- **<head>**
- **<title>**
- **<body>**
- **<h1>**
- **
**
- **<p>**

13) Why we are going for JavaScript?

- JavaScipt is commonly used for creating websites.

- JavaScript used both on the server-side and client-side

14) Example of editors for write HTML code?

- Sublime
- Vs code
- Notepad
- notepad++

OBJECT-ORIENTED PROGRAMMING LANGUAGE

1) What is OOP?

- Object-oriented programming is a programming concept that works on the principle of abstraction, polymorphism, inheritance encapsulation
- It allows users to create objects they want and create methods to handle those objects

2) OOPS, Properties?

- Class
- Object
- Abstraction
- Inheritance
- Encapsulation
- Polymorphism

3) What is the class?

- A class is a blueprint of an object
- Before we create an object we need to define a class
- The class contains fields and methods

4) What is an Object?

- An object is an instance of the class
- We have to use the new keyword to create an object

5) Why we are called java an object-oriented programming language?

- In java, you can not code anything without declaring classes and object
- Even the small “Hello World” program we should declare the class

6) Features of java?

- Java is a platform-independent language

7) What do you mean by platform-independent?

- Platform independence means, that we can write and compile the java code in one platform, we can execute that class on any other platform

8) What is polymorphism?

- Polymorphism in java can be defined as a task, that can perform a single action in different ways
- Type of Polymorphism
    - Compile-time polymorphism
    - Run time polymorphism

9) What is method overloading?

- When a class has multiple methods with the same name but with different number of type and parameters means that is called method overloading

10) What is method overriding?

- When subclass and superclass has same methods, the same number of parameters with the same type and also the return type means that is called method overriding

11) What is data abstraction?

- Abstraction is an important concept of object-oriented programming that allows us to hide unnecessary details and also show only the needed information
- A real-time example of abstraction can be a motorbike brake. We know what brake does. When we apply the brake motorbike will stop, but the working of brake kept hidden from us

12) What is inheritance?

- Inheritance is one of the key features in oops that allows us to create a new class from the existing class
- The new class that is created is called a subclass
- The existing class from where the child is derived is called the superclass
- Example
    - Bus and car is a subclass of automobile
    - Orange and apple is a subclass of fruit

13) What is abstract?

- The abstract class can not be instantiated
- We use the "abstract" keyword to declare abstract class
- An abstract class can have both abstract and regular methods
- An abstract method does not have its own body

14) What is the interface?

- The interface is a fully abstract class
- It includes a group of abstract methods
- We use the interface keyword to create an interface
- Like abstract classes, we can not create objects for an interface
- We use implements keyword to implement an interface

15) What is encapsulation?

- Encapsulation is one of the key features of OOPs.
- It refers to the bundling of fields and methods inside a single class
- It helps us to achieve data hiding

BASIC PROGRAMMING QUESTIONS

1) What is JVM?

- JVM is Java virtual machine
- It is the run time environment for the compiled java class file

2) What is a variable?

- A variable is a name of the memory location
- It is used to stores the data
- The value can be changed and it can be used many times

3) What are literals?

- Literals are the constant value assigned to a constant variable

4) What is a token?

- Constants
- Identifiers
- Operators
- reserved words

are called tokens

5) What is a structured programming language?

- C is a structured programming language.
- In a structured programming language, we can break the program into parts using functions
- It is an easy way to understand and modify
- Functions also provide code reusability

6) What is an unstructured programming language?

- Unstructured programming is a type of programming that generally executes in sequential order
- We can not use functions in unstructured programming

7) What is recursion?

- A function that calls itself is called a recursive function
- The process of recursive is called recursion