A network is a complex system comprised of multiple interconnected components that enable the transmission of information, resources, or communication between these components and a central control center. In computer networks, computing devices (such as computers, servers, or mobile devices) communicate and exchange data with one another.

The Internet is a worldwide system of interconnected computer networks that utilize the Internet protocol suite to connect devices across the globe. It functions as a network of networks, encompassing various types of networks including private, public, academic, business, and government networks with different scales, ranging from local to global.

Extensible Markup Language (XML) is a format designed for storing and transporting data. It is both human-readable and machine-readable, making it self-descriptive. XML is commonly used for distributing data over networks and is employed by various tools and protocols.

The XML declaration provides instructions for the processor to understand the specifics of the XML file. It includes information such as the version of XML being used and the character set encoding. The encoding attribute specifies the character set, and commonly used encoding is UTF-8, which represents characters using 8-bit blocks in Unicode Transformation Format.

Computer-based systems can be categorized into two main types based on the distribution of their components.The choice between a standalone or distributed system depends on the specific requirements, scalability needs, and desired architecture of the application or solution being developed.

Client-server architecture is commonly implemented using a 3-tier or n-tier architecture to achieve separation and distribution of components.In a 3-tier architecture, there are three main layers: the presentation layer (client), the application logic layer, and the data storage layer.

DNS (Domain Name System) is a network that comprises Domain Name Servers. Its primary function is to map domain names (such as www.example.com) to their corresponding IP addresses. This translation allows computers to communicate with each other using human-readable domain names instead of relying solely on numerical IP addresses.Unified Resource Identifier (URI) is a string of characters used to identify and locate resources on the internet.

A website is a collection of web pages that typically contain static content. In the early days of the web, websites were created using HTML, which provided a way to structure and display content. However, modern websites often incorporate server-side application components and databases to generate content dynamically.

E-commerce is a broad domain that encompasses various related concepts, including internet marketing, electronic fund transfer, and online transaction processing. E-commerce systems facilitate online buying and selling over the internet. These systems come in a wide variety of types and cater to different industries and services. This allows customers to access information, make transactions, and manage their accounts remotely.

Overall, e-commerce systems enable a wide range of online transactions, spanning different industries and services. They facilitate convenient and efficient buying and selling experiences over the internet.It is important for businesses to carefully consider these advantages and disadvantages when

implementing an e-commerce strategy and develop mitigation plans to address any potential challenges.