

QUIZ - 45

(1.) Which protocol is used for communication on the World Wide Web?

Ans. TCP/IP
SMTP
HTTP
DNS

(2.) Which of the following is a function of DNS?

Ans. To convert IP addresses to domain names
To convert domain names to IP addresses
To secure network communication
To manage network traffic

(3.) What is the purpose of port numbers in networking?

Ans. To identify the type of network protocol being used
To identify the source and destination devices in a network
To identify the type of data being transmitted
To identify the application or service being used

(4.) How many sets of numbers are in an IPv4 address?

Ans. Two
Three
Four
Five

(5.) What does TCP/IP stand for?

Ans. **Transfer Control Protocol / Internet Protocol**
Transmission Control Protocol/Internet Provider
Transport Control Protocol/Internet Provider
Transmission Control Provider/Internet Protocol

(6.) Which layer of the OSI model does TCP operate on?

Ans. Physical layer
Transport layer
Network layer
Session layer

(7.) Which layer of the TCP/IP model is responsible for transmitting data over a physical network connection?

Ans. Application Layer
Transport Layer
Internet Layer
Link Layer

(8.) Which layer of the TCP/IP model is responsible for routing data between networks?

Ans. Application Layer
Transport Layer
Internet Layer
Link Layer

(9.) Which layer of the OSI model is responsible for establishing, managing, and terminating sessions between applications?

Ans. Physical Layer
Data Link Layer
Transport Layer
Session Layer

(10.) Which layer of the OSI model is responsible for routing data between different networks?

Ans. **Network Layer**
Data Link Layer
Physical Layer
Transport Layer

(11.) Which layer of the OSI model is responsible for managing network access and controlling data flow?

Ans. **Data Link Layer**
Network Layer
Transport Layer
Presentation Layer

(12.) What is a WebSocket?

Ans. A type of web server
A protocol for real-time, two-way communication between a client and a server
A type of browser extension
A markup language for web pages

(13.) Which protocol is used by the WebSocket handshake to upgrade the HTTP connection to a WebSocket connection?

Ans. TLS
SSL
HTTP/1.1
WebSocket

(14.) Which layer of the OSI model is responsible for providing a common interface for applications to access network services?

Ans. Transport Layer
Session Layer
Presentation Layer
Application Layer

(15.) Which protocol is commonly used in the Application Layer to exchange data between web browsers and servers?

Ans. **HTTP**
SMTP
Telnet
UDP

(16.) What is the first step a browser takes when a user searches for a website?

Ans. Establish a TCP connection with the web server
Parse the HTML code of the website
Contact the DNS server to obtain the IP address associated with the website
Render the content of the website on the browser

(17.) What port number is used for establishing a TCP connection between a client's browser and a web server for HTTP communication?

Ans. 53
80
110
443

(18.) What is the difference between HTTP and HTTPS?

HTTP uses TCP for transport, while HTTPS uses UDP.
HTTP is a secure protocol, while HTTPS is not.
HTTPS uses SSL/TLS encryption to secure data transmission, while HTTP does not.
HTTP is used for video data transfer, while HTTPS is used for audio data transfer.

(19.) What is an Operating System (OS)?

Ans. **A set of computer programs that manage the hardware and software resources of a computer system.**
A type of software that only manages the hardware resources of a computer system.
A type of software that only manages the software resources of a computer system.
None of the above.

(20.) What is the need for an OS?

Ans. To provide a user interface for users to interact with the computer system.
To manage hardware resources such as CPU, memory, and input/output devices.
To manage software resources such as programs, files, and data.
All of the above.

(21.) Who developed the first OS?

Ans. Bill Gates
Steve Jobs
Linus Torvalds
None of the above.

(22.) Which of the following is not a function of an OS?

Ans. Provides a user interface for users to interact with the computer system.
Manages hardware resources such as CPU, memory, and input/output devices.
Manages software resources such as programs, files, and data.
Generates reports and performs data analysis.

(23.) Which of the following is a key difference between hashing and encryption?

Ans. Hashing is one-way while encryption is two-way

Encryption is one-way while hashing is two-way

Hashing and encryption are the same things

Hashing and encryption are not related

(24.) What is cryptography?

Ans. The process of hacking into secure data

The practice of securing communication and information

The process of encrypting all data for safekeeping

The practice of sharing sensitive data with authorized individuals

(25.) Why is encryption used in web development?

Ans. To make data unreadable

To ensure the confidentiality, integrity, and authenticity of data

To prevent unauthorized access and data breaches

All of the above