21 Lecture - CS506

Important Mcqs

Sure, here are 10 multiple-choice questions (MCQs) related to Socket Programming along with their solutions and multiple options:

Question 1: What is a socket in the context of networking and programming?

A) A type of cable used to connect computers.

B) A software component for sending and receiving data over a network.

C) A type of protocol used for secure data transfer.

D) A hardware device used to route network traffic.

Solution: B

Question 2: Which protocol is commonly used for socket programming on the internet?

A) HTTP

B) FTP

C) SMTP

D) TCP/IP

Solution: D

Question 3: Which function is used to create a socket in most socket programming APIs?

A) `open_socket()`

B) `create_socket()`

C) `socket()`

D) `new_socket()`

Question 4: What is the role of the server in socket programming?

A) Sending requests to clients.

B) Processing client requests and providing responses.

C) Providing internet access to clients.

D) Managing network infrastructure.

Question 5: In socket programming, what does the term "IP address" refer to?

A) Internet Provider address of the server.

B) Internal Processor address of the computer.

C) Internet Protocol address of a network interface.

D) Internal Port address of the application.

Question 6: Which socket type is used for connection-oriented communication in TCP?

A) SOCK_STREAM

B) SOCK_DGRAM

C) SOCK_RAW

D) SOCK_SEQPACKET

Question 7: What does the term "port number" signify in socket programming?

A) It's a unique identifier for a computer on the internet.

B) It's a code that represents the physical location of a server.

C) It's an integer that identifies a specific process on a host.

D) It's a measure of the bandwidth of a network connection.

Question 8: Which socket API function is used to establish a connection between a client and a server?

A) connect()

B) send()

C) bind()

D) listen()

Question 9: What is the purpose of the `bind()` function in socket programming?

A) To associate a socket with a local IP address and port number.

B) To establish a connection between client and server.

C) To send data over the network.

D) To close a socket gracefully.

Question 10: Which socket type is used for connectionless communication in UDP?

A) SOCK_STREAM

B) SOCK_DGRAM

C) SOCK_RAW

D) SOCK_SEQPACKET