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SUB: DATA COMMUNICATION

DATE: 20/08/2025

QUESTION 1

When sending mobile payment, data communication ensures the transaction is securely transferred from the phone to then bank system. The sender is the mobile device or payment App that initiates the request. The message is the payment information including the amount, account number and authentication details. The medium is the communication channel usually mobile data, wife or SMS services. The receiver is the banks server or the payment gateway that processes and verifies the transaction

QUESTION 2

WIRED: fiber optic cable

WIRELESS: WIFI, Mobile network (4G/5G)

Wired media such as twisted pair and fiber optic cables offers high reliability and stable connection. They are less affected by interference and often provides faster, more secure data transfer however they are expensive to install, less flexible and difficult to move once zset up. Wireless media like WIFI and mobile networks provides great flexibility and mobility allowing users to connect from almost anywhere without physical cable. They are easier and cheaper to deploy but can suffer security risk. Overall, wired is better for stability while wireless is better for convenience and mobility

QUESTION 3

PURPOSE

The hypertext transfer protocol is foundational protocol of the world wide web enabling communication between web browsers (clients) and web servers. It defines how messages are formatted and transmitted and how web servers and browsers should respond to various commands. HTTP operates over the IP/TCP protocols suite. Facilitating the transfer of resources such as HTML documents, images and videos

REAL WORLD APPLICATION

When someone enters a URL in a browser, it initiates an HTTP request to the corresponding web server. The server processes this request and sends back an HTTP response containing the request resources. This exchange allows the browser to render the webpage for the user to view and interact withS