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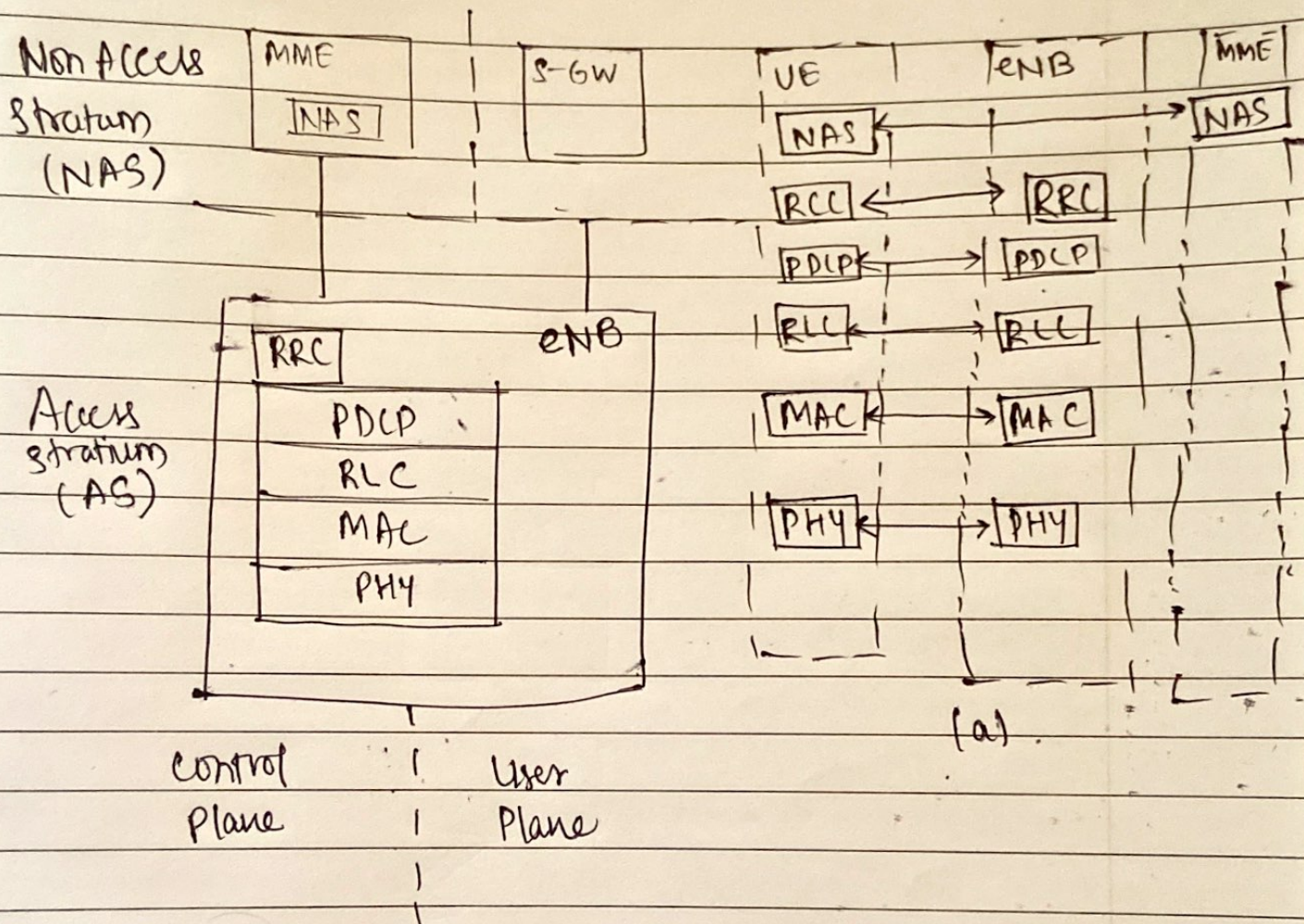
19/11/2027

BE CMPNA

Q3] A)

- ① LTE protocol stack is divided into two main parts -
NAS (Non-Access stratum) and AS (Access stratum)
- ② It can be categorized into control plane and user plane
User plane of eNB consists of PHY, MAC, RLC and PDCP layers.
- ③ Control plane of eNB consists of these 4 layers and in addition RRC layer as well.
- ④ PHY layer takes care of frame formation as per TD or FDD topology and as per OFDMA structure. It takes care of modulation and coding of different control and traffic channels.
- ⑤ MAC - Medium Access Control. takes care of multiplexing/demultiplexing of RLC packet data units (PDUs). Scheduling information reporting. Error correction through Hybrid ARQ.
- ⑥ RLC - Radio Link Control manages the error correction through Automatic Repeat request (ARQ). Segmentation according to the size of the transport block and re-segmentation in case of a retransmitted is needed.
- ⑦ PDCP - Packet Data Convergence Protocol is header compression and in-sequence delivery and retransmission of PDCP session data units (SDUs). Duplicate detection and ciphering and integrity protection.
- ⑧ RRC - Radio Resource Control.
Broadcast system information related to NAS and AS
- ⑨ NAS - Non Access stratum
Connection/session management between UE and the core network for authentication, registration.

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19/182022
BE (MPN A).



LTE protocol stack.