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: yj 'Ugmguvt, Assignment Questions

1. Explain the advantages of OFDM for LTE.
2. Explain flat LTE SAE architecture.
3. Explain the following in brief:
 - a) Path loss and Shadowing
 - b) Angular Spread and coherence distance
 - c) Doppler spread and coherence time
4. Explain with a neat diagram, adaptive modulation and coding
5. With a neat block diagram, explain OFDM communication system. Also mention the need of timing and frequency synchronization.
6. Explain SC-FDMA uplink transmitter with a neat figure.
7. Explain spatial diversity of multiple antenna techniques.
8. Explain open-loop MIMO in spatial multiplexing.
9. Explain the LTE Radio interference protocols.
10. Explain the transport channels in LTE.
11. Explain the hierarchical channel structure of LTE.
12. Explain briefly layer mapping and precoding in modulation mapping.
13. Explain uplink control information.
14. Explain the types of uplink reference signals.
15. Briefly explain the function of H-ARQ feedback in downlink and uplink transmission.
16. Explain in brief types of random access procedures in LTE.
17. Explain the main services and functions of PDCP sublayer for the user plane.
18. Explain RRC states and its functions.
19. Explain mobility management over the SI transfer.
20. Explain three basic approaches to mitigate ICI in downlink.