

MOBILE AND WIRELESS COMPUTING

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ASSIGNMENT 1

QUE: DESCRIBE THE FEATURES AND CHARACTERISTICS OF THE 5G AND THE PROPOSED 6G MOBILE TELEPHONE NETWORK TECHNOLOGIES.(8 MARKS)

Here's a features and characteristics of the 5G nad the proposed 6G mobile telephone network technologies:

5G:

1. Enhanced mobile broadband (eMBB) with peak data rates up to 20 Gbps
2. Ultra-reliable low latency communication (URLLC) with latency as low as 1 ms
3. Massive machine-type communications (mMTC) supporting up to 1 million devices per km²
4. Network slicing for customized services
5. Millimeter wave (mmWave) frequencies for increased bandwidth

Proposed 6G:

1. Terahertz (THz) frequency bands for even higher data rates (potentially up to 1 Tbps)
2. Sub-millisecond latency (potentially as low as 0.1 ms)
3. Integration of artificial intelligence for network optimization
4. Advanced spatial multiplexing techniques like Orbital Angular Momentum (OAM)
5. Support for holographic communications and extended reality (XR)