

(b) Explain the transmitter and Receiver block diagram of Microwave link.

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OR

2 (a) How does the radius of first fresnel zone influence the path loss measurement in a microwave link ? Explain with an example.

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(b) Explain the concept of frequency reuse in wireless communication.

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3 What is the difference between Multiplexing and Multiple Access technique ? Explain CDMA with reference to Mobile Radio.

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OR

3 Compare the FDMA, TDMA and CDMA and also explain the TDMA technique with reference to satellite system.

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4 (a) Discuss the GSM architecture and its various features.

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(b) Explain the wireless LAN 802.16 with the help of block diagram.

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OR

(a) Explain the DECT Frame format for cordless telephony and mentioned the signification of A field and B field used in frame.

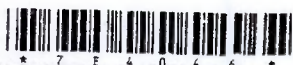
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(b) Explain the various IEEE 802.11 standards.

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5 (a) With the help of schematic diagram, explain the conversion process in up converter and down converter.

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- (b) A satellite in GEO orbit is at a distance of 40,000 km from a Earth station. The required flux density at the satellite to saturate one transponder at a frequency of 14.5 GHz is -90 dBW/m². The Earth station has a transmitting antenna with a gain of 52 dB at 14.3 GHz.

Find

- (i) The EIRP of the Earth Station
(ii) The output power of the earth station transmitter.

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OR

- 5 With aids of neat block diagram, discuss satellite communication system and also explain the step involved in launching of a Geo-stationary satellite.

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