Subject :WMC **Subject Code: EEC 801** **Branch: ECE**

1. What is meant by frequency reuse?
2. What are the trends in cellular radio systems?
3. What do you mean by forward and reverse channel?
4. What is the function of control channel? What are the types?
5. What is channel assignment? What are the types?
6. What is fixed channel assignment?
7. What is dynamic channel assignment?
8. Define MS, BS and MSC.
9. Define had off and mode of hand off.
10. Write the types of hand off.
11. Define Cell, Cluster.
12. What do you mean by foot print and dwell time?
13. What are the major types of cellular interference?
14. What are the techniques used to expand the capacity of cellular system?
15. Define frequency reuse ratio.
16. Define FDMA, TDMA and CDMA.
17. Define Grade of service.
18. What is blocked call clear system(BCC)?
19. What is blocked call delay system?
20. Define cell splitting.
21. What is sectoring?

22. What are the features of TDMA?

23. What are the features of FDMA?
24. What are the propagation mechanisms of EM waves?
25. What is the significance of propagation model?
26. What do you mean by small scale fading?
27. What are the factors influencing small scale fading?
28. Define large scale propagation.
29. Differentiate the propagation effects with mobile radio.
30. Define Doppler shift.
31. Differentiate time selective and frequency selective channel.
32. Define coherence time and coherence bandwidth.
33. What do you mean by WSSUS channels

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1. Write short notes on linear equalizer.
2. Consider a transmitter which radiates a sinusoidal carrier frequency of 1850 MHz .For a vehicle moving at 60 mph, compute the received carrier frequency if the mobile is moving (a) towards the transmitter, (b) away from the transmitter.
3. Explain frequency hopped spread spectrum.
4. Explain in detail how equalization takes place in cellular system.
5. What are linear predictive coders.
6. Explain TDMA and FDMA.

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1. Explain free space propagation model.
2. Difference between scattering and diffraction.
3. What is reflection? Explain using Brewster angle.
4. What is small scale multipath propagation?
5. Explain different types of small -scale fading.
6. Define Doppler shift and Doppler spread.

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1. Write different spread spectrum modulation techniques.
2. Explain RAKE Receiver.
3. Give modulation performance in fading and multipath channels.
4. Explain FH-SS.
5. Briefly explain Pseudo-Noise (PN) Sequences.
6. Difference between linear equaliser, and non-linear equalization.