**UNIT-1**

1. Explain about the mobile fading characteristics.

2. What is the need of cellular mobile communication systems?

3. Explain about Hexagonal shaped cells.

4. Write any 4 differences between FDD and TDD.

5. Explain uniqueness of mobile radio environment.

6. Explain the operation of a cellular system.

7. Describe the performance criteria of Cellular mobile systems.

8. Discuss about evolution of mobile radio communications.

9. Explain various Analog and Digital Cellular system with an example.

10. Discuss about classification of wireless systems with an example.

11. Explain the various components of a basic cellular system in detail.

12. What are the limitations of conventional mobile telephone system?

**UNIT-2**

1 Why is the cellular concept incorporated?

2 Discuss about channel assignment strategies.

3 What is frequency reuse distance. How it is measured.

4 How to calculate number of channels in a cellular system

5 Define co-channel interference. Discuss about cochannel interference reduction factor.

6 Discuss about frequency reuse concept with diagram

7 Explain about general description of the problem in cellular radio system design.

8 Derive the desired C/I from a worst case in an Omni directional Antenna System.

9 How the interference is different from Apply noise and explain different types of interference in a cellular system. How co-channel interference is measured at the

mobile unit and at the cell site?

10 Derive the desired C/I from a normal case Apply in an Omni directional Antenna System.

11 Explain cell splitting and its effect on the performance of cellular systems.

12 What is cell sectorization? Explain briefly?