

AMET 21 MOBILE COMMUNICATION SYSTEM

1. INTRODUCTION

Introduction to wireless communication systems

2. THE CELLULAR CONCEPT:

Frequency reuse handoff, interference, trunking and grade of service, improving the capacity of cellular systems.

3. MOBILE RADIO PROPAGATION :

Large scale path loss, reflection, ground reflection, model (2 ray model), diffraction, practical link budget design using path loss models, small scale fading and multi-path, small scale multi-path propagation, parAMET-er of multi –path channels, types of small scale fading, Raleigh and raleigh distribution diversity.

4. ANALOG CELLULAR MOBILE SYSTEM :

AMPS and ETACS system (overview call handling, air interface, N – AMPS).

5. DIGITAL CELLULAR MOBILE SYSTEM :

GSM services, features, system architecture, radio subsystem, channel types, frame structure, signal processing security aspects, network operations.

6. LOW POWER WIRELESS COMMUNICATION SYSTEMS :

Cordless telephone, CT2, DECT,PHS, PACS

7. CDMA digital cellular standard (IS-95) :

Frequency and channel specification, forward and reverse CDMA channel.

8. MOBILE TERMINALS :

Over view, types, radiated power, functional architecture, encryption, subscriber identify module.

9. GLOBAL MOBILE SATELLITE SYSTEM :

Introduction to iridium system, global star system, ICO system, telederic system.

10. THIRD GENERATION MOBILE COMMUNICATION :

System IMT -2000, Introduction, radio aspects, network aspects.