Major Contents covered during Training in Advanced Telecom with Specialization in Mobile Communications

1. *Overview of Telecommunication networks*
   a) *Telecom Network Architecture*
   b) *Local and Trunk network*
   c) *Call Routing*
   d) *Telecom Industry in India - Institutional Mechanism & Role*

2. *Digital Switching Principles*
   a) *PCM principles & Multiplexing of Telecom signals*
   b) *Introduction to latest switches in telecom industry*

3. *Fibre Optic Communication Principles*
   a) *Characteristics of Optical Fibre*
   b) *OF transmission systems and their features*
   c) *Concept of SDH and DWDM*

4. *Mobile Communication Principles*
   a) *Cellular Principles*
   b) *GSM- Principles , Network Architecture, Call Processing, Handover, GPRS, EDGE*
   c) *CDMA –Principles, Network Architecture, Call Processing, Handover, Power Control, EVDO*
   d) *3G technologies and emerging trends*
   e) *Overview of Mobile Services – Postpaid, Prepaid, SMS, VAS, Data*

5. *Broadband, DSL technologies*
   a) *Principles, Network Architecture*
   b) *Broadband Services*

6. *Intelligent Network*
   a) *Network Architecture*
   b) *IN Services*

7. *Next Generation Network*
   Overview and Architecture

Topics Covered under Specialization in Mobile Communications:

a) GPRS – Network Architecture and PDP Call flow

b) EDGE- Migration towards 3G

c) EVDO & Other CDMA technologies

d) 3G technologies – WCDMA principles,3G Architecture, Radio & Core network, Call setup

e) Emerging trends -Wi MAX

f) LTE & 4G technologies, Migration paths

Highlights :

The classroom theory sessions are supplemented through practical exposure on live full complement of latest equipments available in the training centre:

- *Latest switches –OCB, CDOT*
- *Mobile equipments-2G GSM, CDMA, 3G Mobile*
- *OF Systems- SDH, DWDM*
- *Broadband*