

MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY, JAMSHORO
DEPARTMENT OF TELECOMMUNICATION ENGINEERING

FRM-001/00/QSP-004

Dec. 01, 2001



Tentative Teaching Plan

Name of Teacher: **Engr. Zulfiqar A. Arain**

Subject: **Broadband Digital Networks**

Batch: **13TL-I** Year: **Final (7th Semester)**

Semester Starting Date: **18-07-2016**

Semester Suspension Date: **06-11-2016**

| S. No. | Topics | No. of Lecture Hrs Required |
|--|---|-----------------------------|
| 1 | Review of Narrowband Technologies and ISDN, LAN | 2 |
| 2 | Review of MAN, WAN | 2 |
| 3 | X.25, Frame Relay | 2 |
| 4 | Review of Broadband Technologies | 2 |
| 5 | CATV, T- and E-carrier Systems Overview | 2 |
| 6 | Asynchronous Transfer Mode (ATM): Protocol Architecture and Control Signaling | 2 |
| 7 | ATM cells, Cell format, Service categories | 2 |
| 8 | ATM Adaptation layer | 2 |
| 9 | MPLS, GMPLS | 2 |
| 10 | Broadband ISDN (BISDN): Interfaces, Protocols and Signaling, DSSI | 2 |
| 11 | BISDN: Network elements and Structures | 2 |
| 12 | BISDN Layered Model | 2 |
| 13 | ATM layer for BISDN | 2 |
| 14 | Digital Subscriber Line (DSL) Architecture | 2 |
| 15 | DSL broadband technologies (HDSL, SDSL, ADSL, VDSL) | 2 |
| 16 | DSL Line Codes (QAM/CAP and DMT) | 2 |
| 17 | Performance issues in DSL | 2 |
| 18 | Network solutions based on DSL | 2 |
| 19 | Next generation Digital Loop Carriers | 2 |
| 20 | GPON, FTTH | 2 |
| 21 | LTE Networks | 2 |
| Total Number of required Lectures | | 42 |

Signature of Teacher:

Dated:

Remarks of DMRC:

Signature of Chairman:

Dated: