ELECTIVE COURSE II -2- DATA COMMUNICATIONS AND NETWORKING

Objective: *In this course students shall learn the basis of data communication, mod/demodulation techniques, protocol layers that enable computers to interlink.*

UNIT-I

Introduction to Data communication – Basic concepts – OSI model – Signals – Encoding and modulation.

UNIT-II

Data transmission interfaces – Transmission media- Multiplexing – Error detection and correction.

UNIT-III

Data link control – Data link protocols – Local area networks.

UNIT-IV

Switching – Point-to-Point protocol – X.25.

UNIT-V

Frame relay – ATM – TCP/IP protocol : Part-1,2.

TEXT BOOK:

1. **FOROUZAN Behrouz A.,** Data communications and networking, Tata McGrawHill, Second edition, 2003 **[Unit-1 :(**Chapters 1,2,3,4,5); **Unit-2** : (Chapters 6,7,8,9); **Unit-3 (**Chapters 10,11,12); **Unit-4 (**Chapters 14,15,17) **Unit-5** (18,19,24,25)**]**