

# University of Sargodha

## BS 3<sup>rd</sup> Term Examination 2016

Subject: I. T Paper: Computer Communication & Network (CMP-2540)

Time Allowed: 2:30 Hours

Maximum Marks: 80

Note: Objective part is compulsory. Attempt any four questions from subjective parts.

### Objective Part

Q1. Write short answers of the following questions in 2-3 lines only (16\*2=32)

- i. Difference between signaling rate and data rate?
- ii. List two wireless network protocols
- iii. What is connection less oriented protocol also list the name of that protocol?
- iv. What is frequency domain analysis for signal?
- v. Explain scrambling with suitable example.
- vi. What is SNR?
- vii. How twists in per unit length reduce the noise in twisted pair cable?
- viii. Explain synchronous communication.
- ix. Explain delta modulation.
- x. What is flow control and which layer is responsible for this?
- xi. What is parity bit? Why it is used?
- xii. What are the draw backs of infra-red communication?
- xiii. What is the difference between Manchester and Differential Manchester?
- xiv. What is DSL and list down its various types?
- xv. Explain soft switch architecture
- xvi. Define VLANs.

### Subjective Part (12\*4=48)

Q2. Discuss wired LAN topology with suitable examples.

Q3. What is unguided media? Write a note on

- a. Infra-red      b. Microwave

Q4. Explain Wireless LAN Networks and discuss the architecture and services of IEEE 802.11.

Q5. Discuss virtual circuits in detail and provide its example.

Q6. Discuss various generations of cellular networks along with the services provided by every generation.

Q7. Differentiate OSI and TCP/IP models.