

2012

**University of Sargodha**

**BS 3<sup>rd</sup> Term Examination 2020**

**Subject: Computer Science**  
**Time Allowed: 2:30 Hours**

**Paper: Computer Communication & Network (CMP-2540)**  
**Maximum Marks: 80**

**Note: Objective part is compulsory. Attempt any three questions from subjective part.**

**Objective Part (Compulsory)**

- Q.1.** Write short answers of the following in 2-3 lines each on your answer sheet. (16\*2)
- i. ✓ What is encryption? Which layer is responsible for encryption?
  - ii. ✓ How does attenuation differ from distortion?
  - iii. ✓ Difference between packet switching and circuit switching.
  - iv. ✓ Why twisted pair cable is twisted?
  - v. ✓ Which two layers offer reliability?
  - vi. ✓ What is the goal of multiplexing?
  - vii. ✓ Define Infrared signals? Give an example.
  - viii. ✓ Difference between layer 2 switch and bridge?
  - ix. ✗ Define ALOHA and Slotted ALOHA techniques.
  - x. ✓ What is cell sectoring?
  - xi. ✓ Define IEEE 802.11 standard?
  - xii. ✓ Difference between block coding and scrambling?
  - xiii. What is the goal of physical addressing?
  - xiv. Difference between multimode step index and graded index?
  - xv. Why are protocols needed?
  - xvi. Define Ethernet?

**Subjective Part (3\*16)**

- Q.2.** Explain OSI model with functionality of each layer.
- Q.3.** Define VLAN. How VLAN group members can be identified? What are the advantages of VLAN?
- Q.4.** Discuss the generations of cellular wireless networks?
- Q.5.** What is multiplexing? Explain the categories of multiplexing.
- Q.6.** Explain the technologies of xDSL.