University of Sargodha

M.Sc. I. T, 1st Term Exam 2013

Subject: Information Technology   **Paper: Data Communication & Network (IT: 530)**

Time Allowed: 2:30 Hours   Maximum Marks: 80

Note: Objective part is compulsory. Attempt any four questions from subjective part. Attempt all questions on your answer book.

(Objective)   Marks: 16*2 = 32

Q1.   Write short answers of the following in two lines each on your answer book.

1. What is point to point connection?
2. What is the difference between service point address, logical address and physical address?
3. What is multicast? What is the difference between Multicast and Unicast?
4. Mention the types of errors?
5. Define Adhoc Networks?
6. What do you mean by redundancy?
7. List the benefits of P2P network?
8. What is multiplexing?
9. What are the advantages of networking?
10. How data is transmitted over a medium?
11. What do you mean by CSMA?
12. What do you mean by wireless communication?
13. What do you mean by switching?
14. Define parity check?
15. Define Selective Repeat ARQ?
16. What is HDLC?

(Subjective)

2. Explain different types of network structure/architecture?
3. Explain OSI reference model.
4. What is topology? Explain three most popular LAN topologies namely Bus, Ring and Star?
5. Explain different types of switching methods?
6. Explain IEEE 802.11 Architecture and services?
7. Explain Third-Generation Systems and provide appropriate examples.