

**University of Sargodha****BS 4<sup>th</sup> Semester/Term Exam 2021****Subject: Information Technology Paper: Computer Networks (CMPC-208)****Time Allowed: 02:30 Hours****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. (2\*16)**
- Why broadcast link is not favorable in communication?
  - What is client server model in Networks? Give any example.
  - How many types of address are used in networks?
  - What is difference between switch and Access Point?
  - What is HDLC?
  - What is PAP & CHAP?
  - Which protocol use echo packet to check connectivity?
  - How [www.google.com](http://www.google.com) request is entertained by the google DNS server?
  - What is process to process communication? Which layer is responsible for it?
  - What is Intra Domain routing?
  - What is infinity problem to count?
  - What is Encryption? Give example.
  - How twisted pair cable is suitable for communication in the noisy medium?
  - Difference between IPS/IDS, Firewall and VPN
  - What is AAA record?
  - What do you mean by CSMA/CD and CSMA/CA?

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

- Q.2. What Do mean by 3 tier Architecture and why we recommend this in the network?**
- Q.3. a) Write down the different sub protocols of Data link layer?  
b) Difference between IPV4 and IPV6, explain ipv4 header.**
- Q.4. You have given 200.254.32.1/24 IP address and your boss assigned you to make 8 networks blocks with this IP. Write down the new subnet mask and Ip blocks and tell how many useable addresses we get after subnetting?**
- Q.5. How A router make difference between Intra and Inter-domain routing and in Distance Vector routing protocols router deals with count to infinity. why?**
- Q.6. Describe detail analysis on switch working, ARP and ICMP protocols?**