

# **University of Sargodha**

**BS 3<sup>rd</sup> Semester/Term Exam 2021**

**Subject: Computer Science**

**Paper: Computer Networks (CMPC-205)**

**Time Allowed: 02:30 Hours**

**Maximum Marks: 6**

**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\*12)
- Define protocol.
  - Name any four application layer protocols.
  - What is RIP?
  - List the names of multi access protocols.
  - Define Token ring protocol.
  - What is hamming code? How will you calculate it?
  - Define subnet mask.
  - Congestion control is implemented on which layer and how?
  - What is fragmentation?
  - If a host on a network is assigned a subnet address of 172.16.112.2/25, what would be the valid subnet address of this host?
  - What is broadcast address of 172.16.96.0/19 network?
  - What is meant by reliability and accuracy at transport layer?

## **Subjective Part (3\*12)**

- Q.2.** Explain with the help of diagrams the basic network topologies.
- Q.3.** Explain the working and protocols of datalink layer.
- Q.4.** Explain routing with the help of diagram. Also explain any three routing protocols.
- Q.5.** Define and explain classful addressing.
- Q.6.** Explain cellular and wireless networks along with their protocols.