

## **Important questions for DCIP**

Give some reasons for using fragmentation and reassembly.

List the requirements for an internetworking facility.

What are the pros and cons of limiting reassembly to the endpoint as compared to allowing en route reassembly?

Explain the function of the three flags in the IPv4 header.

How is the IPv4 header checksum calculated?

What is the difference between the traffic class and flow label fields in the IPv6 header?

Briefly explain the three types of IPv6 addresses.

What is the purpose of each of the IPv6 header types?

What is the header overhead in the IP protocol?

Describe some circumstances where it might be desirable to use source routing rather than let the routers make the routing decision.

List some practical applications of multicasting.

Summarize the differences among unicast, multicast, and broadcast addresses.

List and briefly explain the functions that are required for multicasting.

What operations are performed by IGMP?

What is an autonomous system?

What is the difference between an interior router protocol and an exterior router protocol?

Compare the three main approaches to routing.

List and briefly explain the three main functions of BGP.

What is the Integrated Services Architecture?

What addressing elements are needed to specify a target transport service (TS) user?

Describe four strategies by which a sending TS user can learn the address of a receiving TS user.

Define the urgent and push features of TCP.

What is a TCP implementation policy option?

How can TCP be used to deal with network or internet congestion?