INTERNETWORKING II
Chapter 4 Study Guide

Which port is used to initially configure a router?

console port (connected to a workstation)

What is the difference between the types of memory in a router?

- RAM

volatile, stores the running configuration file

- ROM

non-volatile memory, stores the bootstrap instructions, basic IOS image, and power-on instructions

- NVRAM

non-volatile memory, stores the backup (startup) configuration file.

- FLASH

non-volatile memory (EEPROM), stores the complete IOS image

What is the Auxiliary port used for?

to hook up a modem

What is stored on RAM and constantly being updated?

the routing table

List the initialization steps the router goes through when it is first powered on.

1. **Power On Self Test**
2. **boostrap program**
3. **Load IOS from Flash**
4. **Load configuration file from NVRAM**

List the commands used to gain access to the different modes.

user EXEC mode: console password
privileged EXEC mode: enable (ena)
global configuration mode: config (t)

interface configuration mode: int (interface)

What one command will show (1) the config file and (2) the amount of NVRAM memory?

show startup-config (show start)

What information is displayed when **show version** is entered?

configuration of system hardware
software version
names and sources of configuration files
boot image name

What is **CDP** and what layer does it operate at?

Cisco Discovery Protocol provides a proprietary command that enables network administrators to access a summary of what the configurations look like on directly connected routers.
Runs at Layer 2

How many **telnet** sessions can you have running simultaneously?

5 sessions

What information is displayed when **show sessions** is entered?

all Telnet connections currently running on router

What command displays routing table entries?

show ip route

Serial 1 is up; line protocol is up indicates what?

that the serial interface 1 is enabled and the protocols are running correctly on it

What information is displayed when ***show interfaces*** is entered?

shows the status of all interfaces/ports on the router, whether they're enabled and if they're running correctly if they are enabled

Show interface serial displays what information?

shows the status of serial interfaces on router. You would get a response like *Serial1 is up; line protocol is up*