

CPSC 460/560 Final Review

1. Topics to cover in the final exam

- Protocol & Protocol Layers, E.g., How a message go through protocol layers at the sender, receiver and routers?
- Internet structure and services
- HTTP, Web caching (Web proxy and CDN)
- DNS
- BitTorrent
- Network delay, bandwidth X delay product
- TCP & UDP
- Reliable transfer protocols (Stop and Wait Protocol) & Sliding Window protocols (Selective Repeat & Go-Back-N)
- TCP details: segment, sequence number, flow control, congestion control, connection setup & shutdown
- DCTCP
- IP addressing (CIDR), IP routing (OSPF, RIP, BGP-4), IP fragmentation & ICMP
- Routers and Switches
- Link layers: frame, CSMA/CD, MAC, Switching
- Packet sniffing
- Datacenter Networks

2. Question Type

- Short answers: expect correct & concise answers (Do not provide long irrelevant answers!)
- Simple calculation (you can bring your calculator though I do not think it necessary)
- Multiple choices
- Some questions need your deep understanding of concepts
 - E.g.: explain how messages are routed in Internet?
 - From AS perspectives?
 - From protocol layer perspectives?...