

**CSC 458/2209 – Computer Networks**

# **Handout # 22**

## **Final Review**



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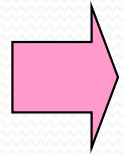
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# Final Review

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- Final exam logistics
  - Review of principles
  - Where next?

# Final Exam Logistics

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- Examination aids allowed:
  - Non-programmable calculators
  - 1 double-sided page of notes
- *No cell phones allowed*

# Final Exam

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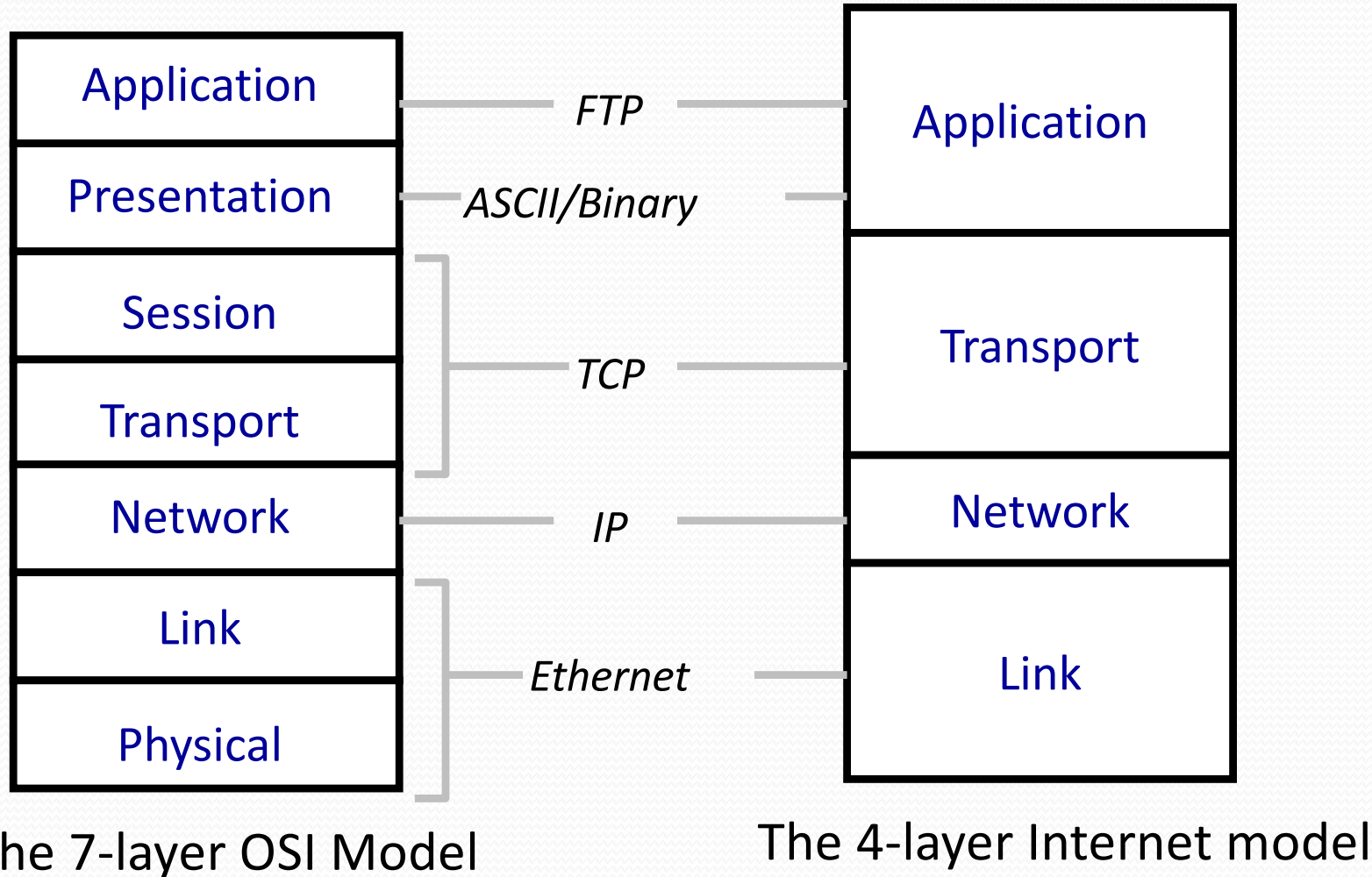
- Part I – Multiple choice
  - 1 correct answer for each question
- Part II – Definitions
  - 4-5 sentences each
- Part III – Longer Questions
  - Might need more time than Part I & II
  - Still very simple problems
  - Similar to midterm and problem sets

# Final Review

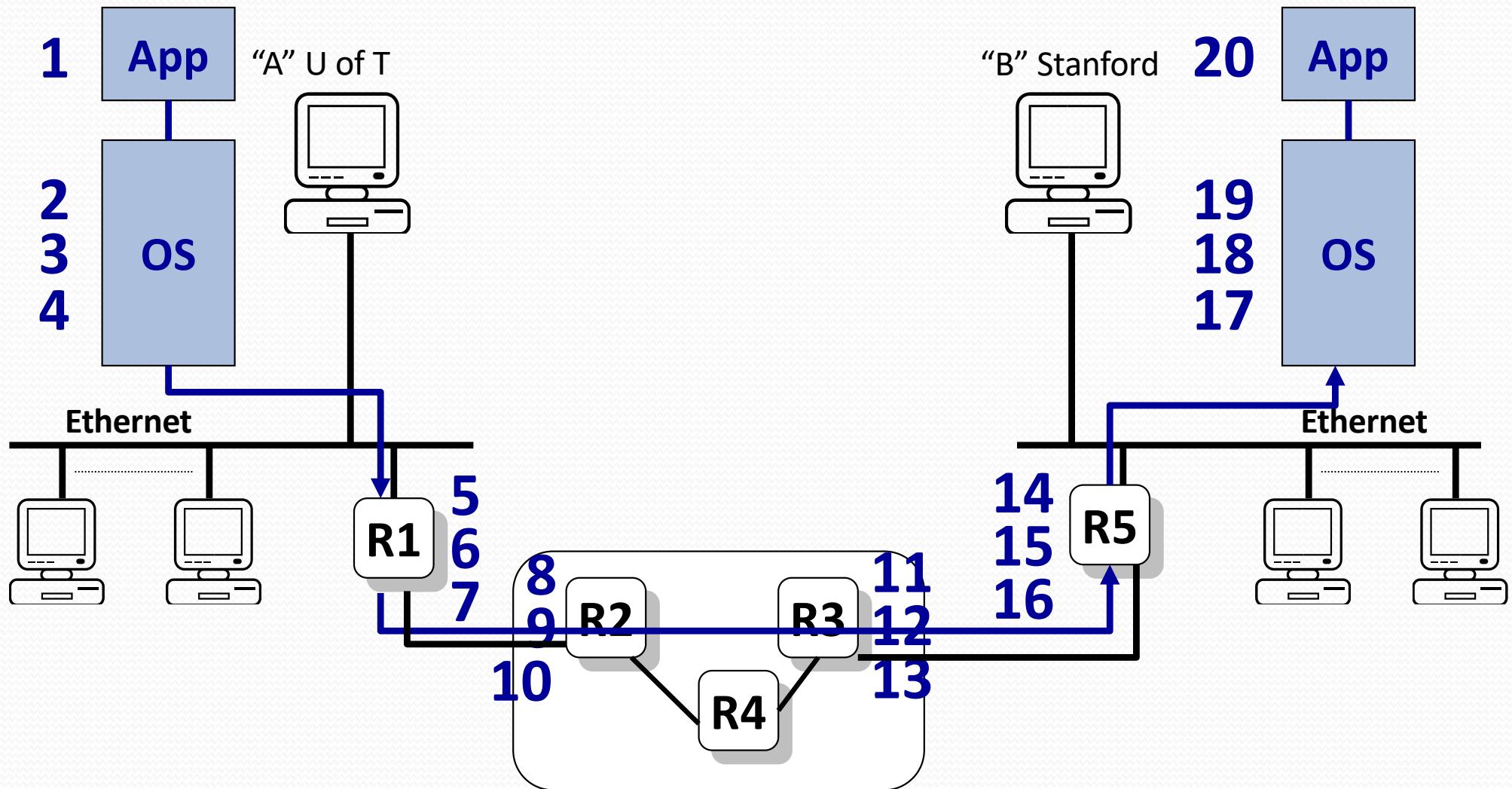
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- Final exam logistics
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# Review of Basic Concepts



# Example: FTP over the Internet Using TCP/IP and Ethernet



# Review of Basic Principles

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- Basic ideas:
  - Packet switching, statistical multiplexing, layering,
- Link Layer:
  - Channel capacity, encoding and clock recovery, error detection/correction, Ethernet switching
- Network Layer:
  - Fragmentation, Bellman-Ford, Dijkstra, addresses and lookups, BGP, IGP



# Review of Basic Principles – Cont'd

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- Transport Layer:
  - Flow control, congestion control, retransmissions and sliding windows, congestion avoidance (RED)
- Miscellaneous:
  - Queuing mechanisms, middleboxes, peer-to-peer, software-defined networking, and network security

# Final Review

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- Final exam logistics
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 Where next?

# Where Next?

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- Courses to take:
  - CSC2203: Packet Switch & Network Architectures
  - CSC2229: Software-Defined Networking
  - CSC309: Programming on the Web
  - CSC2231: Special Topics in Computer Systems
    - Online Social Networking Systems
    - Internet Systems and Services
  - CSC2206: Systems Modeling and Analysis
  - CSC2221: Theory of Distributed Computing
  - CSC2415: Advanced Topics in Distributed Computing
  - CSC2720: Systems Thinking for Global Problems
- Individual study courses
  - CSC494 and CSC495

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# Thank You!