Aalto University S-38.2121 Routing in Communication Networks

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Examination

Vastaa lyhyesti vain viiteen (5) kysymykseen. Give brief and concise answers to only five (5) questions.

- 1. What is routing and what are the key functions of routing? Describe the difference between circuit and packet switching in terms of routing.
- 2. Why does OSPF need to choose the designated and the backup designated router? Give the algorithm, OSPF uses to select the designated and the backup designated router.
- 3. How did CIDR change Internet routing?
- 4. Describe the RPF (reverse path forwarding) algorithm and its properties.

 Describe the flood and prune algorithm and its properties. Give an example of a protocol based on this algorithm.
- 5. What characteristics are typical to mobile ad hoc networks? How do these properties affect routing?
- 6. How do proactive and reactive routing methods differ? Describe how a reactive routing protocol creates a route. Name one reactive routing protocol, and describe briefly how packets are sent in them.