



Examination

Course: E7310 Routing and SDN / Period II -2019
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Give compact answers to four (4) questions. Be specific, if you can. You may answer in English or in Finnish. Vastaa tiiviisti neljään (4) kysymykseen. Kirjoita spesifisesti, mikäli mahdollista. Voit vastata suomeksi tai englanniksi.

1. Kysymys/Question

What are the factors that limit the scalability of classical Ethernet to large networks with many nodes? For each Ethernet limiting factor, tell also how IP is better.

2. Kysymys/Question

Which methods are available for a host to discover its router? If there are more than one router in a subnet, how can a host choose the best router for a flow? Is the method secure?

3. Kysymys/Question

How does the bringing up adjacencies work in principle in link state routing?

4. Kysymys/Question

What is equal cost multipath routing (ECMP)? What are the advantages of ECMP? How can packet re-ordering be avoided under equal cost multipath?

5. Kysymys/Question

Describe Internet group management protocol. When and by whom is it used? Is the protocol Carrier Grade?