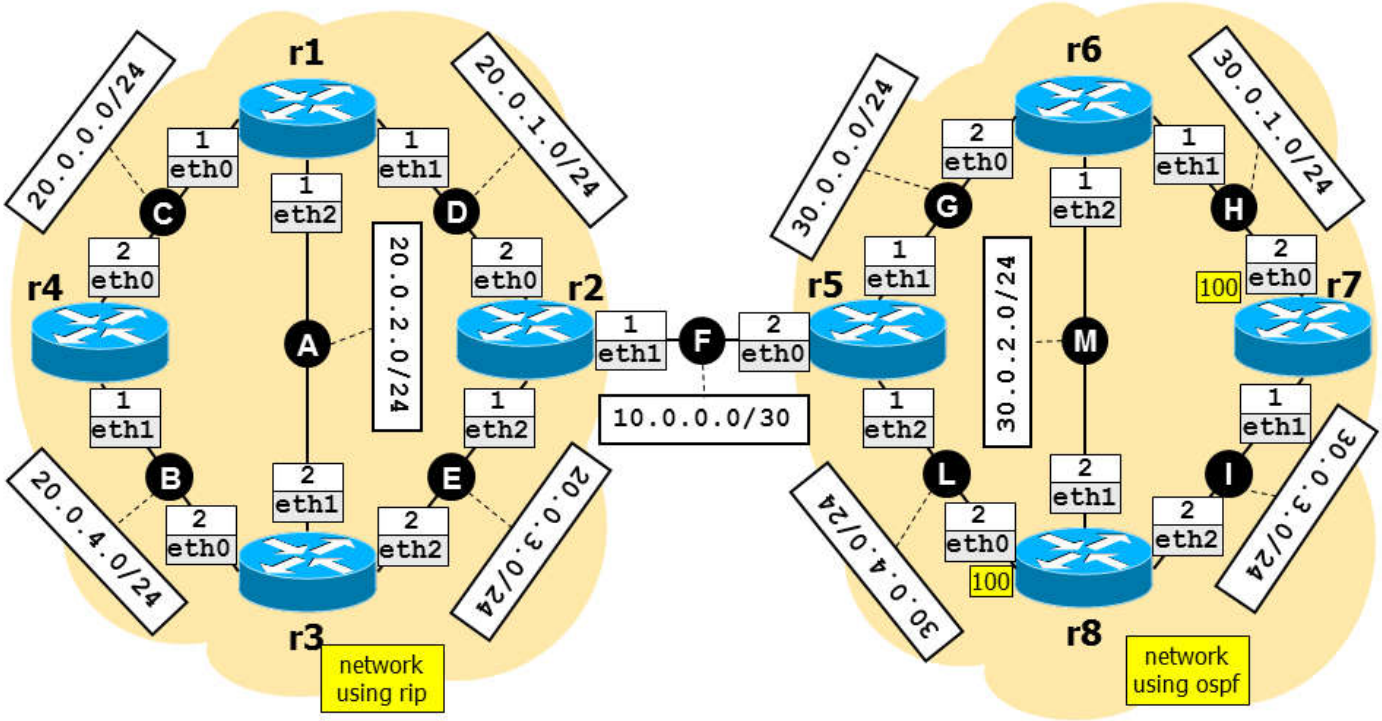
ICN – Examination date: 24-11-2017 – "Butterfly"



Using Netkit, implement the network depicted in the figure and described below.

- ☐ **r1**, **r2**, **r3**, and **r4** are routers running RIP.
- ☐ **r5**, **r6**, **r7**, and **r8** are routers running OSPF.
  - All routers belong to the area 0.0.0.0.
  - Interface **eth0** of router **r8** and interface **eth0** of router **r7** have OSPF cost 100.
- ☐ Router **r2** redistributes the route 20.0.0.0/16 into RIP, as well as every directly connected route.
- ☐ Router **r5** redistributes the route 30.0.0.0/16 into OSPF, as well as every directly connected route.
  - ***Hint***: to redistribute static routes into OSPF use the command **`redistribute kernel`**. Such a command redistributes into OSPF each static route installed in the kernel routing table.

Goals:

Every IP address in the network must be reachable from any router.

The traffic generated from **r7** and directed to **r2** must pass through routers **r8**, **r6**and **r5**.