Candidate Problems for Future Internet Mid-term Examination

1. Why do we need Future Internet?
2. What are the core technologies for Future Internet?
3. If you are an Internet designer, how can you accomplish Clean Slate approach and Evolutionary approach, respectively?
4. What are the Hourglass models of the current Internet and Future Internet?
5. Explain the cross-layer design protocols!
6. Explain the details of current access networks
7. Explain the directions towards the future access networks
8. Explain for IoT services and Cyber Physical System (CPS).
9. Describe the Internet-connected devices what you are interesting.
10. Why do we need DTN and explain the principles of it?
11. What is the TV White Space and why is it useful?
12. Describe use cases of TV White Space.
13. Explain 3 CR paradigms!
14. Explain in details of main functions of CR.
15. Explain roles of Layer 2, 3, and 4 in CR.
16. Explain the basic concept of OPEN Flow.
17. Describe the core components and their functions for SDN.
18. Explain the Standardization for SDN in ONF.
19. Explain the Standardization for SDN in IETF.
20. What is the Open Source Software (OSS) with GPL meaning?
21. Describe the use cases for SDN (you can look for those in the Internet)
22. Describe the OSS SDN Projects.
23. Explain the Open Routing Platforms based on OSS including their architecture.
24. Why do need to have GNU radio and what is it?
25. Explain the details of OpenWRT?
26. What is OpenStack and explain its architecture?
27. What is CloudStack and explain its architecture?
28. What is the difference between OpenStack and CloudStack? (you can easily see it in Google!)
29. What is the Open vSwitch?
30. How use Open vSwitch with SDN controller such as Nox Controller, Floodlight, etc?