

## TLT-2626 “P2P networks”, Exam questions

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No calculators allowed

Please, answer in order of questions

1. List at least four different applications that are naturally suitable for P2P architectures.
2. What does “free-riding” mean?
3. What is the principal difference between Gnutella v0.4 and v0.6?
4. How search is performed in Gnutella v0.4?
5. How search is performed in BitTorrent.
6. What are the advantage/shortcomings of complete mesh DHT?
7. How do shortcuts improve search performance in DHT?
8. How a first chunk is obtained in BitTorrent by a client who just joined the overlay.
9. Can you get a complete copy of a file in BitTorrent without uploading any chunks.
10. Explain the architecture of hybrid P2P systems.
11. Is SIP-based VoIP a hybrid P2P system?
12. Can Skype traverse through firewalls that disable all UDP ports? Why?
13. Does Skype encrypt voice packets?
14. Why do we need to enable traffic localization in P2P file sharing system?
15. Explain the principle of biased choice of peers.
16. What is the principal difference between scheduling in streaming and sharing systems?
17. What is DPI? Why do operators need it dealing with traffic management in P2P systems?
18. What is layered coding? How can P2P streaming benefit from it?
19. What is the major shortcoming of tree-based P2P streaming systems?
20. What do we need incentive mechanisms in P2P systems?