

1. List three main use case scenarios introduced by 5G
2. What is the main goal of ultra reliable and low latency communications (uRLLC)?
3. List three application areas requiring eMBB
4. Briefly explain the trade-off between achieving an ultra-low latency and a high reliable communication at once
5. Describe the Non-Standalone (NSA) deployment scenario of 5G
6. What is the motivation behind the introduction of 5G-New Radio (5G-NR)?
7. List two features of 5G-NR
8. What is beamforming?
9. List two main challenges faced by millimeter wave in V2X environments
10. What is the goal of 5G-V2X?
11. List three main objectives of 5G-V2X
12. What is in-device coexistence?
13. What is the task of 5G-V2X sidelink feedback channel?
14. What is the drawback of blind-retransmission used by C-V2X?
15. List the new introduced sub-modes of sidelink mode 2
16. How does the sidelink mode 2(a) work?
17. How does long-term/short-term sensing in sidelink mode 2(a) work?
18. What is the role of scheduling-UE (S-UE) in sidelink mode 2(b)
19. How to select the S-UE?
20. How does the pre-configuration based S-UE selection work?
21. What is the main challenge of sidelink mode 2(b)?
22. Describe the coexistence issue between C-V2X and 5G-V2X
23. List two main mechanisms enabling the coexistence of C-V2X and 5G-V2X
24. What are the challenges of the time division multiplexing (TDM) enabling the coexistence of C-V2X and 5G-V2X?
25. How to deal with the co-existence of C-V2X and ITS-G5/DSRC?
26. How to enable an interoperability between C-V2X and 5G-V2X?

27. How to cope with the coexistence issue between ITS-G5/DSRC and WiFi?
28. How does 5G-V2X support fully automated driving?
29. Describe the high density platooning use case?
30. What is the motivation behind the introduction of 5G-V2X-based use case remote driving?
31. What is collective perception?