By OnlineInterviewQuestions.com

UDS Protocol Interview Questions

Practice Top UDS Protocol Interview Questions and Answers

Q1. What is UDS Protocol?

UDS stands for Unified Diagnostic Services which is an automotive protocol. it allows the diagnostic systems that communicate with the ECUs to diagnose faults and reprogram the ECUs accordingly. The term unified refers to combining and consolidating all the standards like KWP 2000, ISO 15765, and others.

Q2. What are uds services?

Unified Diagnostic Services is a diagnostic communication protocol service used in electronic control units within automotive electronics. it is specified in the ISO 14229-1. It is derived from ISO 14230-3 and now obsolete ISO 15765-3.

Q3. Explain uds frame format?

The UDS frame format is as follows:

- First Frame
- Single Frame
- Flow Control Frame
- Consecutive Frame

First Frame: If there are more than 8 bytes of data then PCI will begin with a "1" to indicate the first frame. This is the first part of a segmented message.

Flow Control Frame: It is an Acknowledgement from the receiver that follows the first frame begins with "30". The second byte specifies how many Consecutive frames will pass before a Flow control is again sent. The third byte specifies the delay between 2 consecutive frames. 00 for as soon as possible. Consecutive Frame

Consecutive Frame: It allows the first flow control frame. It begins with "21", goes all the way to "2F" and restarts with "20" if more data is there.

Single Frame: This is for the transfer of Unsegmented messages. PCI - first nibble is zero. The second nibble ranges from 0 to 7.

Q4. Explain periodic message types of UDS?

Unacknowledged Segmented Data Transfer (USDT) and Unacknowledged Un-segmented Data Transfer (UUDT) are periodic message types of UDS. USDT stands for Unacknowledged Segmented Data Transfer and UUDT stands for Un-segmented Data Transfer.

Q5. List some uds negative response codes?

Some UDS negative response codes are as follows:

NRC Code Value	NRC Code Name
0x12	Sub-function Not Supported
0x13	Incorrect Message Length Or Invalid Format
0x14	Response Too Long
0x15 – 0x20	ISO SAE Reserved

Q6. What is dcm autosar?

DCM stands for Diagnostic Communication Manager which is an Autosar module in ECU software. it handles the tester diagnostics functionalities like UDS, KWP and OBD etc.

Q7. What is diagnostic communication?

Diagnostic communication is communication between an automobile or mobile machine and external test equipment generally known as a tester.

Q8. List categories of services offered by UDS Protocol Stack?

The categories of services offered by UDS Protocol Stack are listed below:

- Fault Diagnostics
- UDS Protocol Stack
- Remote Routine Activation
- Upload/Download Capabilities
- Data Transmission Capabilities

Please Visit OnlineInterviewquestions.com to download more pdfs