

SSL Record Types

1.
 1. From client: Client Hello
 2. From server: Server Hello
 3. From server: Certificate, Server Key Exchange, Server Hello Done
 4. From client: Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
 5. From client: Application Data Protocol: http-over-tls
 6. From server: New Session Ticket, Change Cipher Spec, Encrypted Handshake Message
2.
 - Content type: 1 byte
 - Version: 2 bytes
 - Length: 2 bytes

Client Hello

3.
 - Content type: Handshake (22)
4.

Cipher Suite: TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256 (0xc02b)

 - Public-key-algorithm: ECDHE
 - Symmetric-key-algorithm: ECDSA
 - Hash algorithm: sha256

Client Key Exchange

5. 65 bytes

Application Data

6. It is being encrypted by the symmetric-key-algorithm.
7. Yes
8. No, they are not being distinguished.