SECURITY SERVICES OF X.800

① Authetication — assurance that the communicating entity is the one it claims to be.

Peer Entity Authentication — used w/ a logical connection to provide in the identity of the entities connected.

Data-Origin Authentication— in a connection-less transfer, provides assurance that the source of received data is as claimed.

② Access Control— prevention of unauthorized use of a resource. This service controls who can have access to a resource, under what conditions access can occur, & what those accessing the resource are allowed to do.

③ Data Confidentiality— protection of data from unauthorized disclosure.
· Connection confidentiality — protection of all user data on a connection.
· Connectionless confidentiality — " " " in a single data block.
· Selective-field confidentiality — The confidentiality of selected fields w/in the user data on a connection or in a single data block.
· Traffic-flow confidentiality — protection of info that might be derived from obser-vation of traffic flows.

④ Data Integrity — assurance that the data received are exactly as sent by an authorized entity (no modifications).
· Connection integrity w/ Recovery — provides for the integrity of all user data on a connection & detects any modification/insertion/deletion/replay of any data w/in a data sequence, w/ attempted recovery.
· " " w/out Recovery — same as above, but w/out recovery.
· Connectionless Integrity — provides for the integrity of a single data block & may take the form of detection of modification.
· Selective-Field connection Integrity — provides for the integrity of selective fields w/in the user data of a data block transferred over a connection & determines whether the selected fields have been modified, inserted, deleted, or replayed.
· Selective-Field connectionless Integrity — " " " w/in a single connectionless data block; determines whether the selected fields have been modified.

⑤ Nonrepudiation — provides protection against denial by 1 of the entities involved in a communication of having participated in all or part of the communic-ation

Nonrepudiation, Origin — Proof that the msg was sent by the specified party.
Nonrepudiation, Destination— Proof that the msg was received by the specified party.