A. P. SHAH INSTITUTE OF TECHNOLOGY
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(Religious Jain Minority)

Subject: CN

Semester: V

Protocol Hierarchies

To reduce design complexity, most networks are organized as a stack of layers or levels, each one built upon the one below it.

The number of layers, the name of each layer, the content of each layer & the function of each layer differ from network to networks.

The purpose of each layer is to offer certain services to higher ~~network~~s(layers), sheilding those layers from the details of how the offered services are actually implemented.

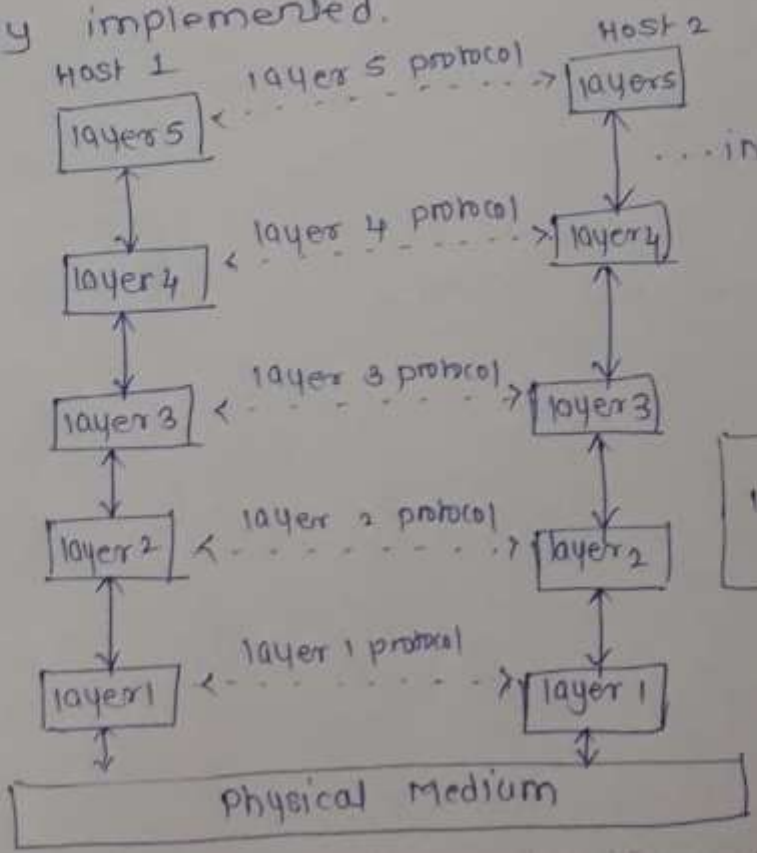

Fig:
layer, protocol & interfaces

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Layer n on one machine carries on a conversation with layer n on another machine.
The rules & conversations used in this convers^{n} are collectively known as n protocol.
A protocol is an agreement between the communicating parties on how communication is to proceed. In above fig. the entities comprising the corrosponding layers on different machines are called peers. (process, hardware, or human being).
Between each pair of adjacent layers is an interface.
The set of layers and protocols is called a network architecture.
A list of protocols used by a certain system, one protocol per layer, is called protocol stack.

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