4.1

A ) Modes : Static, Dynamic

B ) Command : ipconfig

4.2

A ) Meaning : The routing table is a data table stored in a router or a networked computer that lists the routes to particular network destinations and, in some cases, metrics associated with those routes.

B ) Command : route add

C ) Command : route add, specifying the destination network and gateway.

4.3

A ) Command : tracert

B ) RTT proves : network latency

4.4

A ) How many : 16

B ) Compression Rules : Omitting leading zeros in each 16-bit field & consecutive sections of zeros can be replaced with double colons (::) once in an address

4.5

A ) How many : 1

B ) The interface ID parts of the IPv6 addresses of the network adapter are derived from its MAC address. This process ensures that each network adapter has a unique IPv6 address

4.6

A ) yes

B ) Difference : for a direct network, the destination is directly reachable through the network interface, whereas for a remote network, the destination is reachable through a gateway/router

4.7

A ) Above : ICMPv6 protocol

B ) Denotes : that the packet did not receive a reply within the specified time limit