

## CN-lab

### Lab-1 cisco packet tracer

It is an integrated simulation, visualisation, collaboration and assessment environment and it is built by a company named cisco.

\* It includes two types of workspace.

- ① Logical : It shows the logical network built by user. It contains the device of generic, real and modular and it is a multi user network.
- ② Physical : It shows the physical dimension of the logical network. It contains the device and wiring closet, building, city and intercity views and it is a wireless association management.

### Hub

- ① Hub belongs to layer 1 of an OSI model means a physical layer.
- ② Hub prefers half duplex transmission.
- ③ It is a functional based broadcast.
- ④ Hub is commonly used as a LAN component of a LAN.

### Switch

- ① Switch belongs to layer 2 of an OSI model that means it is a data link layer device.
- ② Switch prefer full duplex transmission.
- ③ It functions based on MAC address.
- ④ A switch is used by LAN.

### Router

- ① Router belongs to layer 3 of an OSI model that means it is a network layer.
- ② It is full duplex in nature.
- ③ It functions based on IP address.
- ④ A router is utilised by LAN as well as WAN.