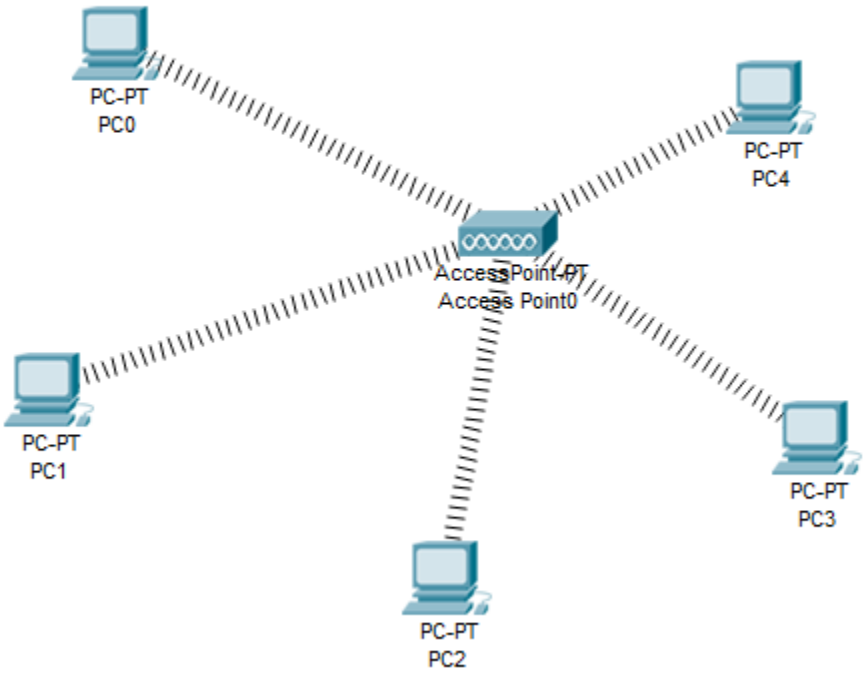
SYCS CN
PRACTICAL NO 8

AIM:
Using Packet Tracer, create a wireless network of multiple PCs using appropriate access point.



Access Point is a networking sub device in a LAN (Local Area Network) which provides other locations to connect and enables the devices on the network. It is a wireless device that allows connecting with wired Devices. An Access Point is a standalone physical appliance that adds the capability of an existing wired network. An AP is like an Ethernet hub. An AP can't function as a router. It is mostly used in larger enterprises or organizations.

Router acts as a core device that sets up the network in a Local Area and manages the communication of all the devices which are connected to it. The router forwards or delivers the data packets in an organized way between computer networks. It forwards the IP between the wireless subnet and other

subnets. It can connect both end-user clients and acts as a gateway between the LAN and the internet. A Router is a combination of an Access Point (AP), an Ethernet Router and a Firewall. It can serve both wired and wireless connectivity to the end-users.

	Access Point	Router
1.	An Access point is a networking device that allows connecting the devices with the wired network.	A Router works as a sender, receiver and analyser between data and computer networks that are linked with it.
2.	An access point is mostly used in LANs(Local Area Networks).	A Router is used in both LANs (Local Area Networks) and WANs(Wide Area Networks).
3.	Maintenance cost is very high	Maintenance cost is low as compared to Access Point.
4.	It covers more laptops, computers and smartphones.	It covers fewer devices.
5.	Access Point support a range upto **2000 sq. ft** which is approximately **185.806 sq. meters.**	Routers support a range of upto **150 ft (46 m)**indoors and **300 ft (92 m)** outdoors.

6.	It is mostly used in large enterprises which have big offices and buildings.	It is mostly used in homes , SOHO working environments and organisations.
7.	An Access point can’t function as a router.	A Router can function as an access point.
8.	An access point can’t deliver the data packets.	A Router delivers data packets in an organized way.