**SURPRISE TEST**

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**SEMESTER:-** 4th

**BRANCH:-** CSE

**SECTION:-** 807/B

**SUBJECT:-** COMPUTER NETWORKS

**Q1. 10 people are sitting in a room. If they want to communicate with each other, what will be the best transmission media to be used and why?**

**Ans.** The best way to communicate with each other is to use cables for communication.

Through the wire they all can connect each other in easy way and share data or communicate with each other.

There are types of cables for connecting the computers:

* **Coaxial cables:** Coaxial cables have a single copper conductor at the center, while a plastic layer provides insulation between the center conductor and braided metal shield. The metal shield blocks outside interference from fluorescent lights, motors, and other computers.
* **Fiber optic cables:** Fiber optic cables possess a center glass core surrounded by multiple layers of protective materials. They avoid electrical obstruction by transmitting light instead of electronic signals, making them perfect for environments with large amounts of electrical interference.
* **Shielded Twisted Pair (STP) Cable:** Often referred to colloquially as simply ethernet cables, STP cables employ a special type of copper telephone wiring used for business installations. An external shield functioning as a ground is added to the standard twisted pair of telephone wires.

**Q2. If we replace switch with hub then systems will communicate with each other. No For both cases yes/no, give the reason.**

**Ans.** Yes, If we replace switch with hub then systems will communicate with each other.

Reason:

A hub is the least expensive, least intelligent, and least complicated of the three. Its job is very simple: anything that comes in one port is sent out to the others.

And, A switch does what a hub does, but more efficiently. By paying attention to the traffic that comes across it, it learns which computers are connected to which port.

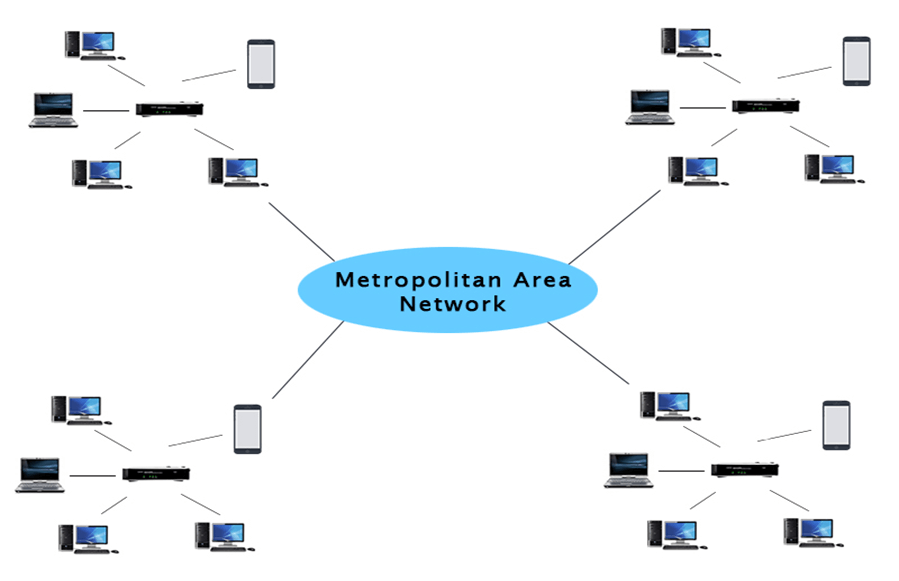
They both work in same way but switch does same work with more intelligently and efficiently.

**Q3. You are a member of a club that has a project to build a MAN, where would this project likely to take place? Elaborate the network with a diagram.**

**Ans.** MAN network likely to take place in the metropolitan area, which could be a single large city, multiple cities, towns and college/university.

Like WANs, a MAN is made up of interconnected LANs. Because MANs are smaller, they are usually more efficient than WANs, since data does not have to travel over large distances. MANs typically combine the networks of multiple organizations, instead of being managed by a single organization.

**DIAGRAM:**

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