Course Name: O Level (2nd Sem)   **Subject: ICT**
**Topic: FDDI**   **Date: 28-05-20**

FDDI (Fiber Distributed Data Interface): FDDI is another ring like network. Unlike of Token Ring, FDDI uses two concentric rings. In one ring the Token travels clock-wise and in the other, it is counter clock-wise.

In FDDI, both rings are created by using 2-strand multimode fibre. 2-strand fibre is the one in which, there are two cores in one cladding. Here both of the cores are used for creating both rings. By using 2-ring strategy FDDI becomes much faster than Token ring.
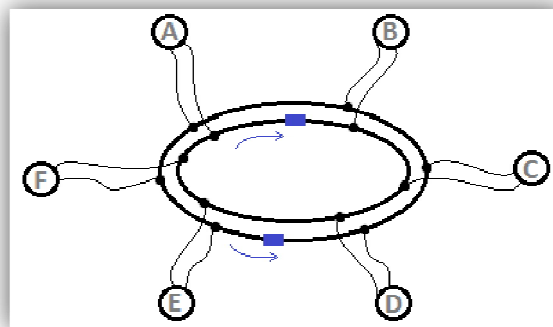
Here in this diagram, we see that B is closest to A on the inner ring but most distant on the outer ring. Machines use whichever token is applicable to them.

Uses of FDDI: FDDI can be used as a simple LAN whereas it can be used as to connect multiple LANs together. Usually FDDI is used in industries as a Backbone Network that provides connectivity to many different LANs.
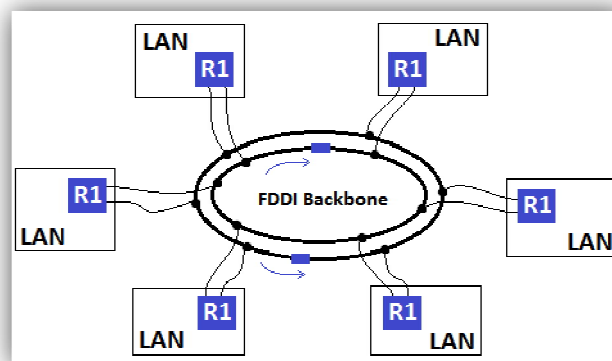
Fault Tolerance in FDDI: In FDDI, a concept named Wrapping is used to provide fault tolerance in the network. In FDDI wrapping, there is an external router that connects to both of the rings dividing them in two equal parts.

If any of the part fails or faces breakdown, the external router provides external routing for the tokens and half of the ring keeps working always.

Assignments:

1. What is FDDI? What are its advantages over simple Token Ring?
2. Briefly discuss about Fault Tolerance mechanisms in FDDI.