Assignment no. 01

1. How are OSI and ISO related to each other?

→ ① ISO stands for International Standards Organisation.

② ISO is a multi national organisation which tries to standardize network communication protocols at the the international level.

③ OSI stands for Open System Interconnection.

④ OSI is a model that ISO put together as a networking commune communication standard.

2. Match the following to one or more layers of the OSI model:

a. route determination

b. Flow control

c. interface to transmission media

d. provides access for the end user.

→

a. route determination ⟶ Network layer

b. Flow control ⟶ data link layer, transport layer

c. interface to transmission media → Physical Layer

d. Provides access for the end user → Application Layer

3. Match the following to one or more layers of the OSI model.

a. reliable process to process message delivery - → Transport layer

b. Route selection → Network layer

c. Defines frames → Data link layer

d. Provides to user services such as frames email and file transfer. → Application layer

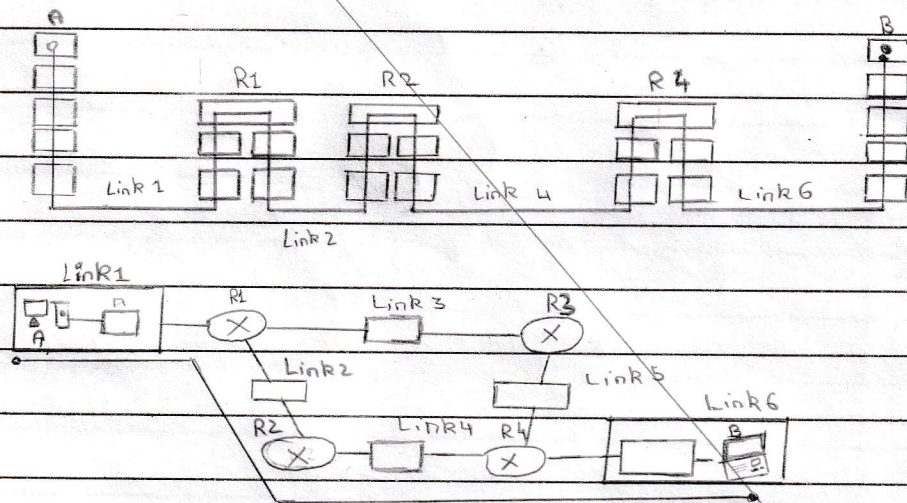e. Transmission of bit stream across physical medium → Physical layer

4. Match the following to one or more layers of the OSI model.

a. Communicates directly with user's application program → Application Layer

b. Error correction and retransmission → Data link layer, transmission layer

c. Mechanical, electrical and functional interface → Physical Layer

d. Responsibility for carrying frames between adjacent nodes → Data link layer

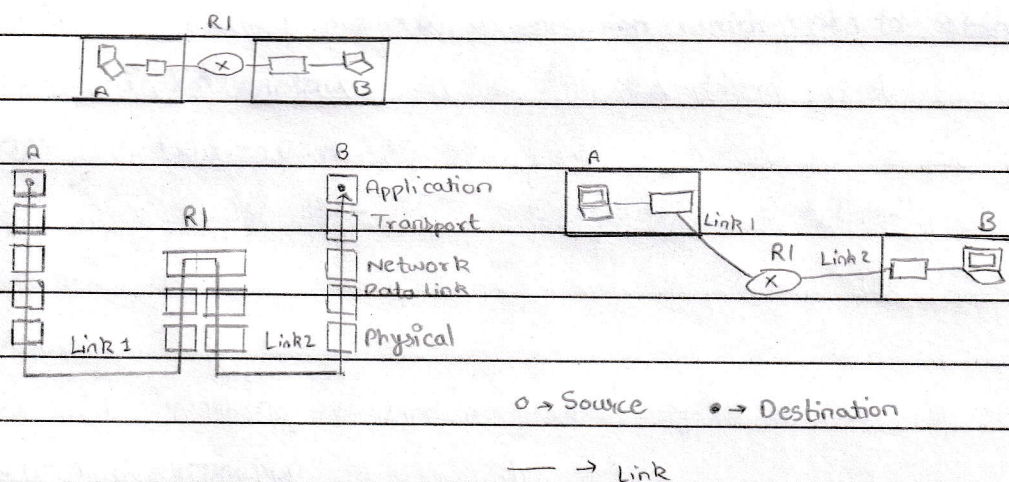5. Match the following to one or more layers of the OSI model.

a. Format and code conversion services → Presentation Layer

b. Establishes, manages, and terminates Sessions. → Session Layer

c. Ensures reliable transmission of data → Transport Layer, Data Link layer

d. Log-in and Log-out protocol procedures → Session Layer

e. provides independence from differences in data representation → Transport Layer

6. Show the communication at the application layer for the a simple private internet (Figure 2.19).
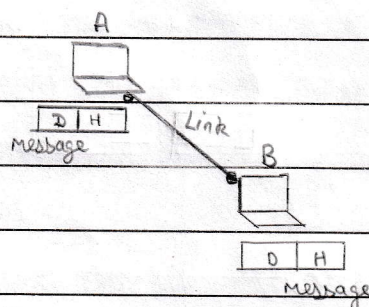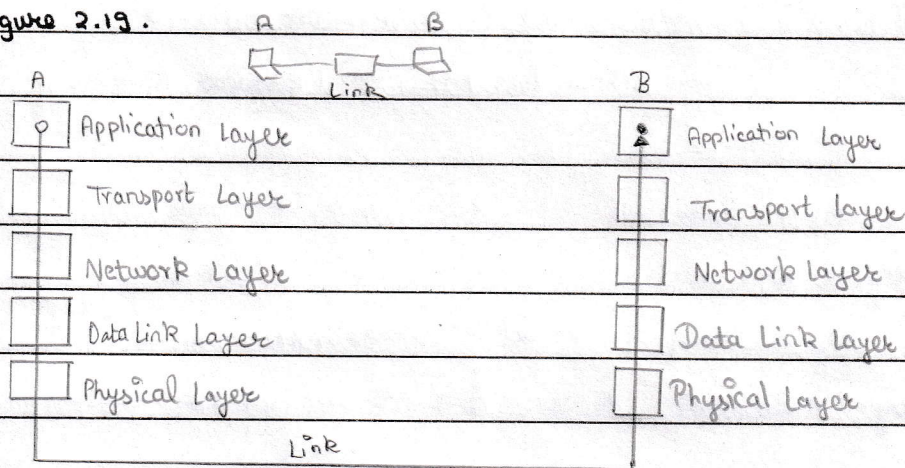
7. Show the communication at the application layer for the simple private internet shown in Figure 2.20.

0 → Source   • → Destination

⸺ → Link

6. Show the communication at the application layer for the simple private internet in figure 2.19.

LEGEND	
○	Source
•	Destination
⸺	Link
D	Data
H	Header