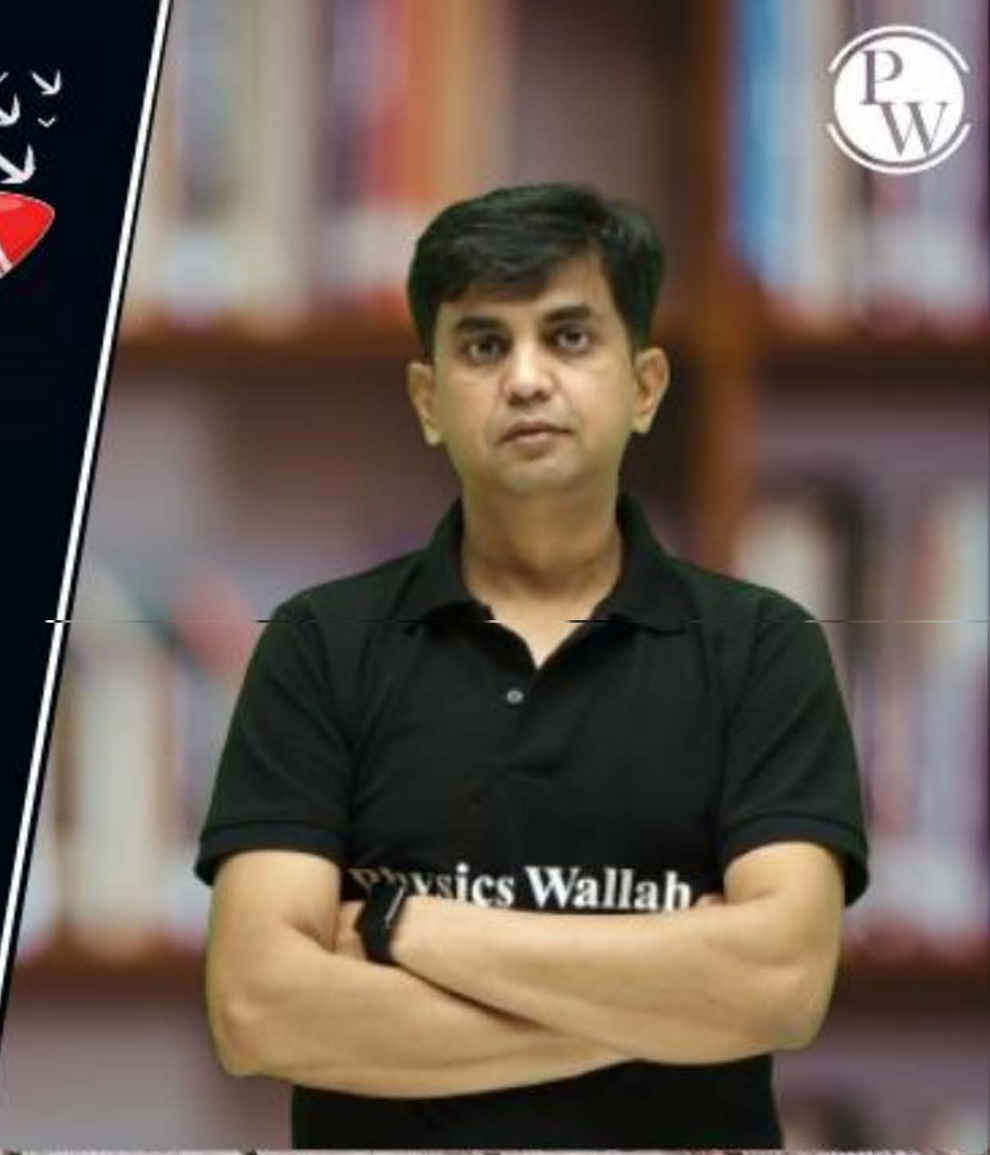
CS & IT ENGINEERING

Computer Network

Introduction



By- Abhishek Sir

DPP - 01 Discussion Notes

[MCQ]

#Q. Which of the following is a function of the application layer ?

A. Packet routing and forwarding → Network Layer

B. Provide network services to users

C. Framing and error control → Data Link Layer

D. Host-to-host connectivity → Network Layer

Ans: B

[MCQ]

#Q. Which layer of OSI model is responsible for data encryption and decryption ?

A Application Layer

B Presentation Layer

C Session Layer

D Transport Layer

Ans : B

[MCQ]

#Q. Which layer in the OSI model is providing end-to-end connectivity ?

A Application Layer

B Transport Layer → End-to-End (process-to-process)

C Network Layer → Host-to-Host

D Data Link Layer → Node-to-Node

Ans: B

[MCQ]

#Q. The protocol data unit (PDU) for the transport layer in the Internet stack is :

TCP/IP Model

A Frame → Data Link Layer (PDU)

B Datagram → Network Layer (PDU)

C Segment → Transport Layer (PDU)

D Message → Application Layer (PDU)

Ans : C

[MCQ]

#Q. Which of the following transport layer protocol uses for file transfer application ?

A SMTP

B FTP

C TCP

D UDP

FTP : File Transfer Protocol

FTP → TCP → IP

Ans: C

[MCQ]

#Q. Router is a _____ layer networking device.

A Application Layer → Gateway

B Transport Layer ✗

C Network Layer (Layer-3)(Router)

D Data Link Layer (Switch)

Ans: C

[MCQ]

#Q. Which of the following is a function of the network layer ?

A. Data encryption and decryption → Presentation Layer

B. Error detection and correction → Data Link Layer or Transport Layer

C. Routing and forwarding → Network Layer

D. Multiplexing and demultiplexing → Transport Layer

Ans : C

[MCQ]

#Q. Which of the following address type is used by the network layer ?

A MAC Address → Data Link Layer

B IP Address (Logical Address) → Network Layer

C Port Number → Transport Layer

D None of the above

Ans: B

[MCQ]

#Q. Matching the following :

List-I	List-II
P: Segment	I: Application Layer
Q: Frame	II: Transport Layer
R: Datagram	III: Network Layer
S: Message	IV: Data Link Layer

A P-II, Q-IV, R-I, S-III

B P-III, Q-IV, R-II, S-I

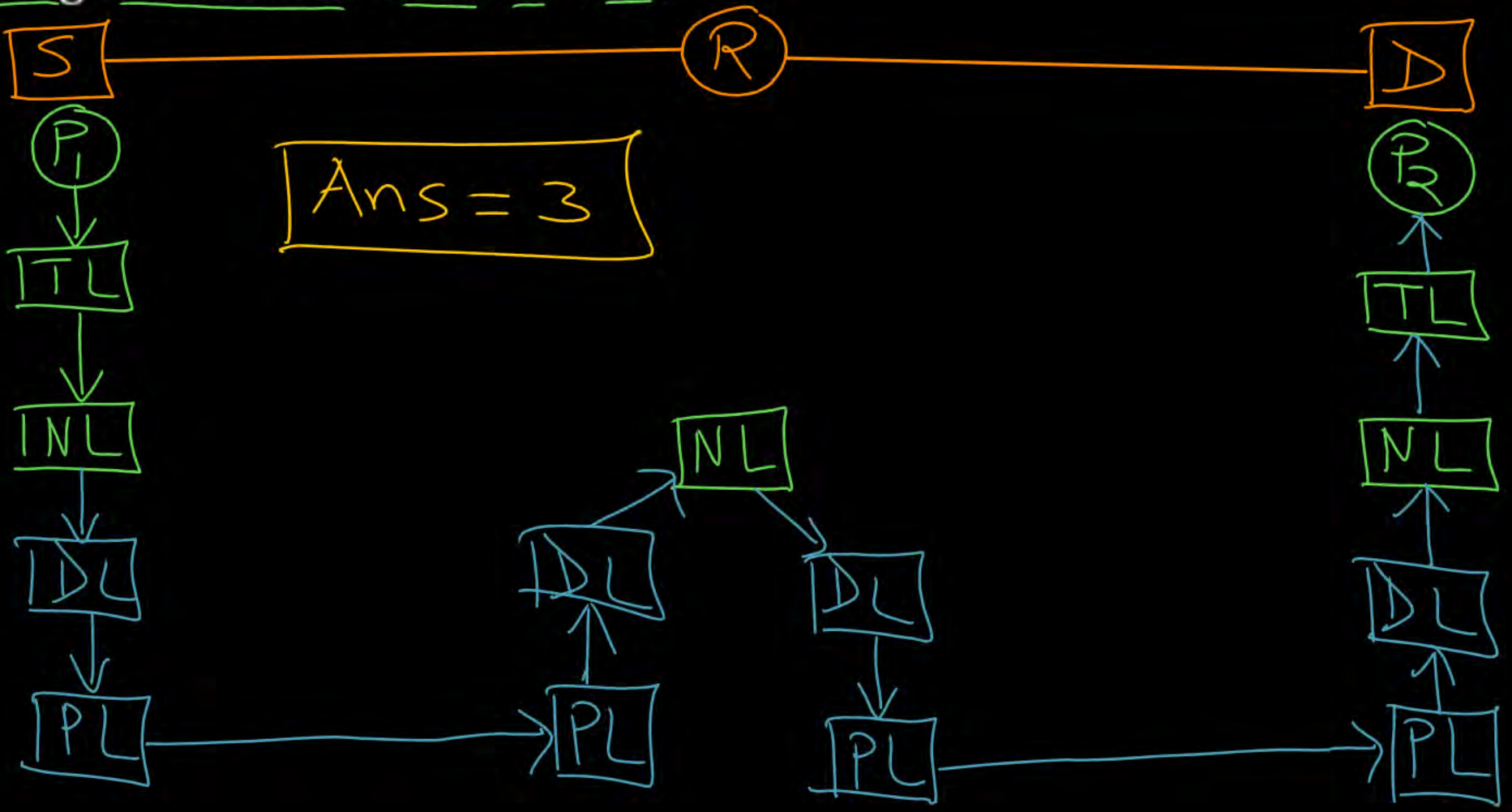
C P-II, Q-IV, R-III, S-I

D P-II, Q-III, R-IV, S-I

Ans: C

[NAT]

#Q. Assume that source S and destination D are connected through one router. Determine how many times each packet has to visit the network layer during transmission from S to D ?



Ans = 3

[MCQ]

#Q. _____ is an example of a circuit-switched network .

A Internet chat → packet switched Network

B Telephone network (PSTN - Public Switched Telephone Network)

C Web browsing } Internet

D Email

Ans: B

[MCQ]

#Q. Which switching techniques provide "connection-less" services ?

A Circuit Switching → Connection Oriented and Reliable

B Packet Switching → Connection less and Unreliable

C Virtual-circuit Switching → Connection Oriented Packet switching

D None of the above

Ans: B

THANK - YOU