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Total No. of Questions : 09] [Total No. of Pages : 02

Paper ID [IT302]

(Please fill this Paper ID in OMR Sheet)

B.Tech. (Sem. - 6th)

ADVANCED INTERNET TECHNOLOGY (IT - 302)

Time : 03 Hours **Maximum Marks : 60**

Instruction to Candidates:

1) Section - A is **Compulsory**.
2) Attempt any **Four** questions from Section - B.
3) Attempt any **Two** questions from Section - C.

Section - A

Q1) *(10 × 2 = 20)*

a) Compare UDP and TCP.

b) What is the advantage of a layered architecture?

c) Explain what is SLIP.

d) What is meant by tunneling?

e) What is the advantage of IPv 6 over IPv 4?

f) What are ICMP packets?

g) Explain how a telnet connection can be established.

h) What do you mean by TCP time out?

i) Explain in brief the file transfer protocol.

j) What do you mean by cookies?

Section - B

(4 × 5 = 20)

Q2) What are the five layers in the Internet protocol stack? What are the principal responsibilities for each of these layers?

Q3) Describe why an application developer may choose to run an application over UDP rather than TCP.

Q4) Describe in detail the ICMP.

Q5) Explain any one internet routing algorithm with a suitable example.

Q6) How big is the LAN address space for IPv 4 and IPv 6.

Section - C

(2 × 10 = 20)

Q7) Describe the Internet Protocol (IP). Also explain its header and how routing is done with the help of suitable examples.

Q8) Explain what is ICMP. Also explain its message types and ICMP address with examples.

Q9) Write short notes on the following:

(a) TCP time out.

(b) RARP packet format.