

Roll No.

Total No. of Questions : 09]

[Total No. of Pages : 02

B.Tech. (Sem. - 6th)

ADVANCED INTERNET TECHNOLOGIES

SUBJECT CODE : IT - 302

Paper ID : [A0519]

[Note : Please fill subject code and paper ID on OMR]

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) What is use of Reverse ARP?
- b) What is the use of flags in a TCP header?
- c) In case I open two different websites from the same computer, is my source port no. and destination port no. going to be different? Explain.
- d) What is PPP protocol used for?
- e) What is the use of Application Layer?
- f) What is tracert used for?
- g) What is rlogin used for?
- h) In case I use gmail through web interface, is SMTP also used between user client and mail server to download mails.
- i) What is the main purpose of link layer?
- j) How does a source machine know that a TCP packet needs retransmission?

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P.T.O.

Section - B

(4 × 5 = 20)

- Q2)** What is the purpose of proxy server? How does it work?
- Q3)** What is the main difference between TCP & UDP protocol? Which protocol is faster and which is more reliable and why?
- Q4)** Why is TCP model having a layered structure? How communication between various layers does takes place on same machine?
- Q5)** Whenever a computer is switched on in a LAN, how and why does it execute ARP?
- Q6)** What is routing? How does it take place? What is the difference between private and public IP addresses?

Section - C

(2 × 10 = 20)

- Q7)** What is the main use of DNS? Explain how the DNS allows a large number of DNS lookups to be processed.
- Q8)** How do two machines establish connection via TCP? Explain the handshaking process in detail.
- Q9)** In case a subnet mask : 255.255.255.0 is used in a LAN, how many bits are used as network address, and in host address? What are the maximum numbers of hosts that can be accommodated in such a case?

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