D 13029 **(Pages : 2)** **Name.....**

Reg. No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, FEBRUARY 2006

Computer Science

CS. 301. COMPUTER NETWORKS

Time : Three Hours Maximum : 60 Marks

Part A

Answer any five questions.
Each question carries 3 *marks.*

1. Differentiate between Packet switching and Circuit switching.
2. What is Simplex protocol ?
3. State the advantages and disadvantages of token ring over ethernet.
4. What are gateways ?
5. Mention the services provided by the session layer.
6. Distinguish between p-persistent and non-persistent CSMA.
7. State the applications of telnet.

(5 x 3 15 marks)

Part B

Answer any **three** *questions.*
Each question carries 15 *marks.*

8. (a) Explain CRC method for error detection with an example. **(10** marks)
   (b) Explain sliding window protocol. (5 marks)

9. Write short notes on:
   (a) Principle of optimality. (5 marks)
   (b) Slotted ALOHA and pure ALOHA. (5 marks)
   (c) Virtual circuits and datagrams. (5 marks)

10. Explain briefly about :
    (a) PCM. (5 marks)
    (b) Network topologies. (5 marks)
    (c) Encryption and decryption methods. (5 marks)

Turn over

11. Describe briefly about :

(a) DNS server. **(3 marks)**

(b) SMTP. **(3 marks)**

(c) Congestion control. **(3**

(d) TCP/IP protocol. (3 m

(e) Firewalls. **(3 n**

[3 **x 15 = 45**