

Roll No. ....

Total Pages : 2

**BT-5/D-22**

**45275**

**COMPUTER NETWORK**

**Paper-ES-CS-AIML-305A**

Time : Three Hours]

[Maximum Marks : 75

**Note :** Attempt *five* questions in all, selecting at least *one* question from each unit. All questions carry equal marks.

1. Explain OSI and TCP/IP model in detail. (15)
2. Explain : (8+7)
  - (a) Network Topologies in detail.
  - (b) Wired media in detail with neat and clean diagrams.
3. Explain :
  - (a) Transmission impairments in detail.
  - (b) ISDN.
  - (c) Differentiate packet switching and circuit switching. (15)
4. Explain multiple access protocols in detail. (15)
5. Explain :
  - (a) Stop and wait.
  - (b) Go Back-N.
  - (c) Sliding window protocol.

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(d) Flooding.

(e) IGMP. (15)

6. Write detailed notes on : (15)

(a) Routing and its types.

(b) Perform subnetting for this network :  
198.20.20.100/24. (15)

7. (a) Explain congestion control algorithms in detail.

(b) Explain TCP header with a neat and clean diagram. (15)

8. (a) Differentiate between public key and private key cryptography.

(b) Explain application layer protocols in detail. (15)