

[This question paper contains 3 printed pages.]

Your Roll No.....

6159

J

PGDCA/II Sem.

Paper—CS-2.4

COMPUTER NETWORK AND INTERNET

Time : 3 Hours

Maximum Marks : 100

*(Write your Roll No. on the top immediately
on receipt of this Question Paper.)*

*Attempt all questions. Parts of a question
should be answered together.*

1. (a) Give the names of different layers present in OSI reference model of Network architecture. Describe the role of data link layer. 6
- (b) In context of ISO-OSI reference model, indicate which of the ISO-OSI layer perform following functions : 4
 - (i) Transmission of raw bits
 - (ii) Congestion control
 - (iii) Taken management
 - (iv) Production of billing information.

[P. T. O.]

- (c) Differentiate between:
- (i) Circuit Switching and Packet Switching
 - (ii) Broadcast Networks and Point-to-Point Networks. 3+2
- (d) Enlist drawbacks of SLIP protocol. 5
2. (a) Describe CSMA/CD protocol used in LAN. 5
- (b) Discuss binary exponential back-off Algorithm. 5
- (c) Describe Manchester encoding and differential Manchester encoding. 4
- (d) Draw IP protocol header and discuss various fields of header. 6
3. (a) What is URL? What are its different components? 4
- (b) Distinguish between :
- (i) FTP and TFTP
 - (ii) Data connection and Control connection. 3+3
- (c) Briefly describe browser architecture. 6
- (d) Describe Bind procedure of Socket API. 4
4. (a) What do you mean by client-server paradigm? Give the characteristics of client and server. 8
- (b) What are the three basic types of Web documents? Give advantages and disadvantages of each type of web document. 10

(c) Give the purpose of following FTP commands :

(1) mget

(2) close.

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5. Write short notes on the following : 5 + 5 + 5 + 5

(i) Spanning tree bridges

(ii) ARP

(iii) Network File System (NFS)

(iv) MIME.