Con.3852-11          ( REVISED COURSE )          RK-3345

(3 Hours)                                    [ Total Marks : 100

N.B. : (1) Question No. 1 is **compulsory**.

(2) Attempt any **four** questions out of remaining **six** questions.

(3) **Illustrate** answers with  sketches wherever **required**.

(4) **Figures** to the **right** indicate **full** marks.

1. (a) Explain LAN Topologies with neat diagram.                                    20
   (b) Write a note on flow control in data link layer.
   (c) Explain congestion control in Datagram Subnet.
   (d) Explain TCP/IP utilites.

2. (a) Explain various transmission media in detail.                                10
   (b) What is role of Modem ?  Explain XDSL in detail.                             10

3. (a) Explain SONET/SDH in detail.                                                 10
   (b) Explain stop and wait ARQ, Go-back-N ARQ, Selective repeat ARQ.             10

4. (a) What is HDLC Protocol ?  What are three frame types supported by HDLC ?     10
       Describe each in detail.
   (b) Explain static and dynamic routing algorithms.                              10

5. (a) With the help of neat diagram explain packet switching and virtual circuit packet   10
       switching and also explain their advantages and disadvantages.
   (b) Explain in detail Repeater, Hub, Bridges, Routers, Gateway, Switches.       10

6. (a) Write a note on IEEE 802·3 Standard in detail.                              10
   (b) Explain Berkeley Application Programming Interface in detail.               10

7. (a) Explain Terminal Network (TELNET) and File Transfer Protocol (FTP).         10
   (b) Draw the layered OSI network architecture.  Explain the function of each layer   10
       in detail.