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Communication - Network

Con. 6133–10.

(REVISED COURSE)

QT-8829

(3 Hours)

[Total Marks : 100

N.B. : 1) Question no.1 is **compulsory**

    2) Attempt any **four** any four questions from remaining.

    3) Assume **suitable data** whenever necessary

Q.1 a) Differentiate between TCP and UDP.   20

    b) Layers of the internet model correlate to the layers of the OSI model explain.

    c) Explain the looping problem in bridge LAN. How to solve it.

    d) Distinguish between packet switching & circuit switching

    e) Explain the ISDN channel structure for basic & primary services.

Q.2. a) Draw the layered OSI network architecture. Explain the function of each layer   10

    and show the path of actual and virtual connection between the layers.

    b) Explain in detail Repeaters, Bridges, Routers and Switches.   10

Q.3.a) Explain XDSL technologies and its application. Explain in detail ADSL.   10

    b) What is the exterior and interior routing? Explain in brief distance vector   10

    routing and path vector routing.

Q.4.a) Draw block diagram of functional architecture of ISDN and explain ISDN channels   10

    and interface

    b) With respect to MAC protocol explain   10

      i) Token Ring

      ii) FDDI

Q.5. a) Write short note on   10

    i) IEEE 802.2

    ii) IEEE802.3

    b) Explain leaky bucket and Token bucket algorithm in details.   10

Q.6.a) what is protocol performance? Derive the relation for protocol performance for   10

    i) Stop and wait flow control mechanism

    ii) Sliding window protocol mechanism.

 b) Explain different types of ARQ techniques and compare their merits and demerits   10

Q.7.Write short note on (Any Three)   20

    i) Utilities   ii) SONET ISDN

    iii) Berkeley API   iv) Error control Techniques.