

BCA-404

301

Printed Pages : 3

Paper Code & Roll No. to be filled in your Answer Book

Roll No.

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BCA (IV - Sem.)

Even Semester Examination - 2016

**DATA COMMUNICATION &
COMPUTER NETWORKS**

[Time : 3 Hours]

[Maximum Marks : 70]

Note : Attempt all questions.

Q1. Attempt the following question: (5×3=15)

- Explain approaches to controlling congestion in the transport layer.
- How do you achieve reliable data transfer over perfectly reliable channel?
- Draw neat diagram of TCP segment. Explain sequence numbers and acknowledgment numbers.
- "Bridges are self-learning." What is meant by that? What are the steps in self-learning?

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(1)

[P.T.O.]

(190)

- (e) Discuss the concept of redundancy in error detection and correction. How does a single-bit error differ a burst error?

Q2. Write a short note on the following: (5x3=15)

- (a) IEEE LAN standard
- (b) PPP
- (c) Five line coding schemes.
- (d) Binary synchronous control
- (e) network design problems

Q3. Attempt **any two** of the following: (2x10=20)

- (a) With a neat diagram explain in detail about the network architecture.
- (b) What are the advantages of using virtual path in ATM. Explain traffic Management in ATM.
- (c) Define physical layer wiring standards of following : 10 Base 2, 10 Base 5, 100 Base F and 1000 Base T.

Q4. Attempt **any two** of the following: (2x10=20)

- (a) Explain link state routing and discuss its advantages over distance vector routing.

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(2)

(198)

(b) What is the difference between Internet architecture and OSI architecture?

(c) Discuss about the links operated on the physical media in detail.

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