NEW

2018

BCA

4th Semester Examination

COMPUTER NETWORK

PAPER—2205

Full Marks : 100

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer *Q. No. 1* and any *four* from the rest.

1. Answer any *five* questions :   5×2

   (a) State the responsibility of the data link layer.

   (b) How many connections are required for 10 nodes in a mesh topology ?

(c) What do you mean by LAN ?

(d) What do you mean by NRZ encoding ?

(e) What are the drawbacks of bus topology ?

(f) What do you mean by Hamming Distance ?

(g) Define URL.

(h) What do you mean by Logical Address ?

2. (a) Explain the functions performed by different layer of ISO-OSI model.

(b) Compare ISO/OSI model with TCP/IP model.

(c) What do you mean by Physical Addresses ? Compare it with Logical Addresses.   8+4+1+2

3. (a) Differentiate between Bit rate and Bavel rate.

(b) Define Attenuation and Distortion.

(c) Differentiate between RZ and NRZ.

(d) Describe Selective Repeat ARQ.

(e) What is Ethernet ?   3+4+3+4+1

4. (a) What is Multiplexing ? Describe briefly different types of multiplexing.

   (b) Differentiate between Multi-level and Multi-slot multiplexing.

   (c) What do you mean by Pulse staffing ?

   (d) Differentiate between Guided Media and unguided Media.   (2+6)+3+2+2

5. (a) Differentiate between circuit switched networks and packed switched networks.

   (b) What do you mean by cyclic Redundancy check (CRC) ?

   (c) What is Piggybacking ?

   (d) Differentiate between TCP and UDP.

   (e) What do you mean by 205.16.37.32/28 ? Explain.
                                                       4+3+2+3+3

6. (a) What is Classful Addressing in IPV4 ? Describe different types of clases in IPV4.

   (b) Differentiate between Classful and Classless Addressing.

(Turn Over)

(c) What is subnetting ?

(d) Explain Tunneling.

(e) Differentiate between ARP and RARP.

(2+3)+3+3+2+2

7. Write short notes (any *five*) :   5×3

(a) Go Back N ARQ

(b) DNS

(c) Link State Routing

(d) Guided Media

(e) Cross Bar Switch

(f) Check Sum

(g) Repeater.

[Internal Assessment — 30 Marks]