BCA(II) / 13 / 15

2015

Time : 3 hours

Full Marks : 80

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

The figures in the margin indicate full marks.

*Answer from **both** the Groups as directed.*

Group – A

(Objective Type Questions)

Answer all questions.

1. Choose the correct answer of the following : 2×10 = 20

   (a) To interconnect two homogeneous WANS, we need a _____ .

   (i) Bridge

   (ii) Gateway

   (iii) Router

   (iv) HUB

ME – 10/1   (Turn over)

(i) Fast Ethernet operates at :

    (i) 10 mbps

    (ii) 100 mbps

    (iii) 1000 mbps

    (iv) None of these

(j) TCP exchanges data in the form of :

    (i) Datagrams

    (ii) Packets

    (iii) Segments

    (iv) Frames

Group – B

(Long-answer Type Questions)

Answer any **four** questions of the following :

$$15 \times 4 = 60$$

2. Explain ring, star and tree topologies along with their advantages and disadvantages.

3. Explain the duties of each Layer of the OSI Model.

4. (a) Differentiate Bridge, Router and Repeater.   (4)

    (b) Differentiate Guided and Un-guided media.   (5)

5. Explain different types of switching techniques along with their advantages and disadvantages.

6. Describe the frame structure of SDLC. How HDLC frame format is superior to SDLC frame format ?

7. Discuss Distance Vector and Link-State Routing in detail.

8. (a) Write short notes on IP-addresses.

    (b) Explain class-ful and class-less addressing.

9. Discuss TCP and UDP transport layer protocol in detail.

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