2019

BCA

4th Semester Examination

Computer Network

Paper – 2205

Full Marks – 70

Time : 3 Hours

The figures in the margin indicate full marks.

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

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

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

    (a) What do you mean by physical Addressing ?

    (b) Write the difference between bit stuffing and character stuffing.

    (c) What do you mean by simplex mode of data flow ?

    (d) What is repeater ?

(e) Differentiate between SWITCH and HUB ?

(F) What is SUBNET MASK ?

(g) What is transmission media ?

(h) What is peer to peer network ?

2. (a) Distinguish among two working principles of circuit switching, packet switching and message passing technique. 6

(b) What is port address ? 2

(c) What is frequency division technique ? 3

(d) What is cross bar switch ? 4

3. (a) State the differences between IPV4 and IPV6. 4

(b) State the difference between static and dynamic routing. 2

(c) Which of the following is a valid host for network 192.168.10.32/28 ? 2

(d) Differentiate between multilevel and multiple - slot allocation. 3

(e) What is pulse stuffing ? 2

(f) How leaky Bucket algorithm works ? 2

4. (a) What is checksum ? 3

   (b) Generate the CRC code for the data word : 1010011110 . The divisor is 1011. 5

   (c) What do you mean by Hamming code ? 3

   (d) How does Manchester encoding differ from differential Manchester encoding ? 2

   (e) What is attenuation ? 2

5. (a) What are the differences between TCP and UDP ? 3

   (b) What is Band rate ? 2

   (c) Write the main function of network layer. 2

   (d) Differentiate between network layer and transport layer. 2

   (e) Compare ISO / OSI model with TCP/IP model. 4

   (f) What do you mean by Logical Addressing ? 2

6. (a) What is guided media ? Discuss different types of guided media. 2+7

   (b) Give advantages and dis-advantages of optical fiber cable. 6

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

    (a) DNS

    (b) TDM

    (C) CSMA

    (d) ARP

    (e) HDLC

[Internal Assessment – 30 marks]

_____