Hall Ticket Number:

Y	(	9	A	c	s	k	2	9	

III/IV B.Tech (Regular / Supplementary) DEGREE EXAMINATION

January, 2022

Fifth Semester

Time: Three Hours

Computer Science & Engineering

Computer Networks

Maximum: 50 Marks

Answer Question No.1 compulsorily.   (1X10 = 10 Marks)

Answer ONE question from each unit.   (4X10=40 Marks)

1. a) Define Protocol.
    b) List the types of errors.
    c) What are the services provided by Data Link Layer?
    d) What is meant by congestion?
    e) Define flooding.
    f) Differentiate IP address and Port number.
    g) Define Jitter.
    h) What is SOCKET
    i) Draw the structure of UDP header.
    j) Define Remote Procedure Call.

Unit -I

2. a) Explain OSI Reference Model with neat diagram.   5M
    b) Explain in detail about communication model with neat sketch   5M

(OR)

3. a) Compare asynchronous and synchronous transmission.   5M
    b) A bit stream 10011101 is transmitted using standard CRC method. The generation of the polynomial is $x^3 + 1$.   5M
        i. What is the actual bit string transmitted?
        ii. Suppose fourth bit from the left is inverted during transmission. How will receiver detect error?

Unit –II

4. a) Discuss the flow control in data link layer.   5M
    b) Differentiate Virtual-Circuit & Datagram Subnets.   5M

(OR)

5. a) Explain Distance Vector Routing algorithm.   5M
    b) Demonstrate the concept of Load Shedding.   5M

Unit -III

6. a) Draw the layout of IPv4 header format and explain it.   6M
    b) Describe the e primitives for transport service.   4M

(OR)

7. a) Compare Multiplexing and Inverse Multiplexing.   5M
    b) Write short note on Crash Recovery.   5M

Unit -IV

8. a) Distinguish between TCP and UDP.   5M
    b) Illustrate the steps involved in remote procedure call with neat sketch.   5M

(OR)

9. a) Discuss the concept of DNS Name Space.   5M
    b) Draw the layout of a TCP header segment and explain it.   5M