

2019

3rd Semester Examination

**COMPUTER SCIENCE (Honours)**

Paper - C 7-P

Computer Networks Lab

[Practical]

SET-I

Full Marks : 20

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.*

**Group-A**

Answer any *one* question on lottery basis

1. Write a program to determine the CRC of a binary string corresponding to a specific divisor. 15
2. Write a program to find the class of an IP address. 15
3. Write a program to implement and Simulate any one adaptive routing algorithm 15

4. Write a program to implement and simulate Stop and Wait ARQ mechanism. 15
5. Write a program to implement and simulate any one static routing algorithm. 15
6. Write a program to find the subnet address of an IP address for a specific subnet mask. 15
7. Implement and simulate selective repeat ARQ mechanism. 15
8. Write a program to demonstrate client server communication using TCP. 15

[Viva : 3, PNB : 2]

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Perform any one experiment chosen on lottery basis.

15×1=15

1. Simulate and implement stop and wait protocol for noisy channel.
2. Simulate and implement Dijkstra algorithm for shortest path routing.
3. Simulate and implement go back N Sliding Window protocol.

4. Simulate Cyclic Redundancy Check (CRC) error detection algorithm for noisy channel.
5. Simulate and implement selective repeat sliding window protocol.
6. Write a program to demonstrate server client communication using a connectionless protocol.
7. Write a program to find the no. of subnets using the subnet mask : 255, 255.255.248

[Viva : 3, PNB : 2]

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