



Daffodil International University
Faculty of Science & Information Technology
Final Examination, Fall 2022

Course Code: CSE313: Course Title: Computer Networks

Time: 2:00 Hrs

Marks: 40

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

1	a)	Distinguish between router & switch on the basis of how they send a packet to the desired receiver.	7	CO2
	b)	Analyze the effect of window size in Go-Back-N pipeline protocol.	5	
	c)	Inspect with proper diagram if someone send datagram from A to B via R (Routing to another LAN).	5	
2	a)	"ABC Computers" has granted the block 19.12.180.0 /12. The administrator wants to create 16 subnets. Identify the custom subnet mask, number of host addresses in each subnet, network and broadcast address of subnet 12.	5.5	CO3
	b)	Suppose DIU CSE has four labs. Lab1 has 120 computers, Lab2 has 50 computers, Lab3 has 26 and lastly Lab4 has 48 computers. If the administrator has IP 192.168.11.0/21, Identify the Network Address, Broadcast Address, Usable IP range and subnet mask.	7.5	
3	a)	Demonstrate with figure the passive and active scanning procedure based on 802.11 LAN architecture	5	CO 4
	b)	File Transfer Protocol (FTP) is used for transforming a file to/from remote host in a client-server mode through port number 21 using TCP. Illustrate the server operation when receiving a client transfer command and what happens after transferring one file.	5	

4. Formulate a new polygon by applying clipping operation using Wiener-Atherton Algorithm. Show the whole procedure using anticlockwise direction only in Figure 3 where ABCDEFGHIJ is subject polygon.

[8] CO3

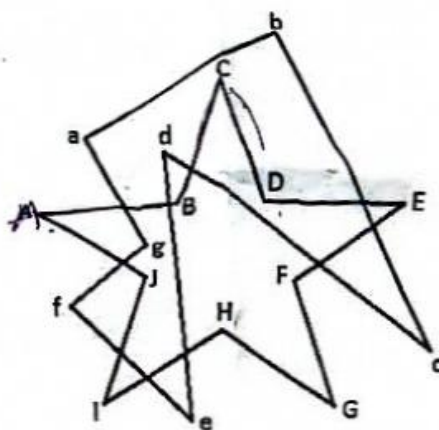


Figure: 3

5. Construct the transformed polygon from the following Figure 4.

[8] CO2

- Rotate the points (*) degree along Y-axis.

- Shear the points $Sh_x = (**)$ units.

* Last two digit of your ID (Ex. 181-15-2534, then it will be 34 degree)

** Second last digit from your ID's last portion (Ex. 172-15-2534, then it will be (-3) units)

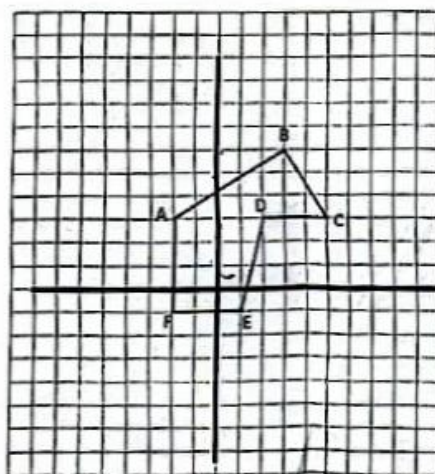


Figure 4

6. Construct a circle by using Mid-Point Circle Algorithm where radius is 16 and center is (2nd last digit of your ID, last digit of your ID).

[8] CO2