



Laboratory Practical / Experiments Report

One of the requirements for obtaining an oral / practical degree for a course

Computer Network (1), CCE 462
Fourth Year
Computer and Control Eng. (CCE) Program
Regulation (2019)
First Semester, 2023/2024

- Student name: كتب الإسم رباعي طبقا لما هو موجود في كشف التسجيل للطلاب باللغة الإنجليزية
- Student Code:
- Section number:
- Student number in the registration statement: كتب رقم الطالب في كشف التسجيل في الفصل





Table of Contents:

Experiment (1): Network Components (Devices, Connectors, Cables, and Cards)	1
Experiment (2): Networking Tools and Tests	5
Experiment (3): Connection Types (Straight Cable, Crossover Cable, Rollover Cable)	9
Experiment (4): Network Topologies	13
Experiment (5): TCP/IP Configuration	17
Experiment (6): IP Subnetting Distribution	21
Experiment (7): Design and Implementation of an Integrated Network	25





Important Instructions:

- The student must complete the experiment at the end of the practical session and go to the instructor to evaluate the experiment.
- Students must interest in writing, drawing and pictures.
- The practical / experiment report should be well coordinated.
- I hope all students to depend on themselves in preparing this report and not to make any transfer attempts from their colleagues.
- If there are similar reports, these students will be evaluated with a zero score for them.
- The student can add any pages he wishes to add after the end of each experiment, if he considers the general format of the report.
- Failure to comply with any of the above important instructions will expose you to losing scores.





Student Name:

Student:

Student number in the registration statement:

Experiment No.	Evaluation
Experiment (1): Network Components (Devices, Connectors, Cables, and	
Cards)	5
Experiment (2): Networking Tools and Tests	<u></u>
Experiment (3): Connection Types (Straight Cable, Crossover Cable,	
Rollover Cable)	5
Experiment (4): Network Topologies	<u></u>
Experiment (5): TCP/IP Configuration	5
Experiment (6): IP Subnetting Distribution	5
Experiment (7): Design and Implementation of an Integrated Network	10
Final Evaluation	40

Signature

Dr. Mohamed A. Abdelhamed Eng.





Student Name:

Student:

Student number in the registration statement:

Experiment No.	Evaluation
Experiment (1): Network Components (Devices, Connectors, Cables, and	
Cards)	5
Experiment (2): Networking Tools and Tests	<u></u>
Experiment (3): Connection Types (Straight Cable, Crossover Cable,	
Rollover Cable)	5
Experiment (4): Network Topologies	_ 5
Experiment (5): TCP/IP Configuration	5
Experiment (6): IP Subnetting Distribution	5
Experiment (7): Design and Implementation of an Integrated Network	10
Final Evaluation	40

Signature

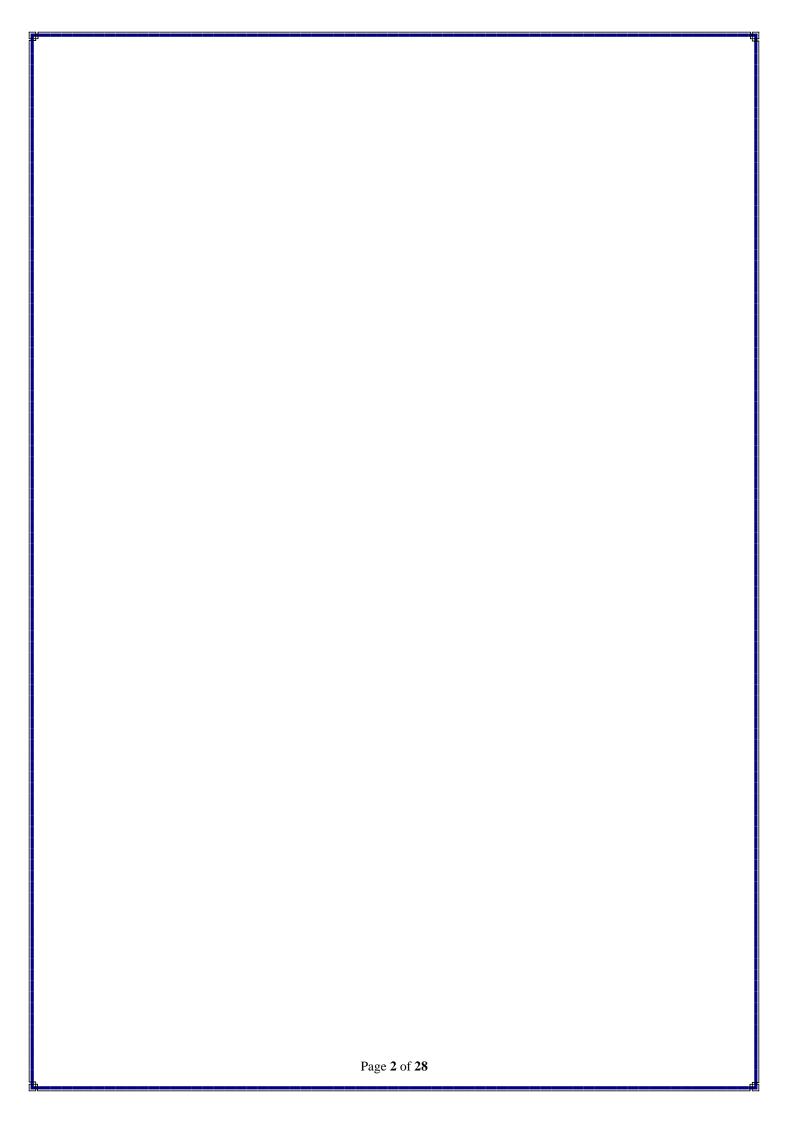
Dr. Mohamed A. Abdelhamed Eng.

Experiment (1)

Network Components (Devices, Connectors, Cables, and Cards)

<u>1.1</u>	<u>Obj</u>	ecti	ves

1.2 Equipment / Program Requirements:



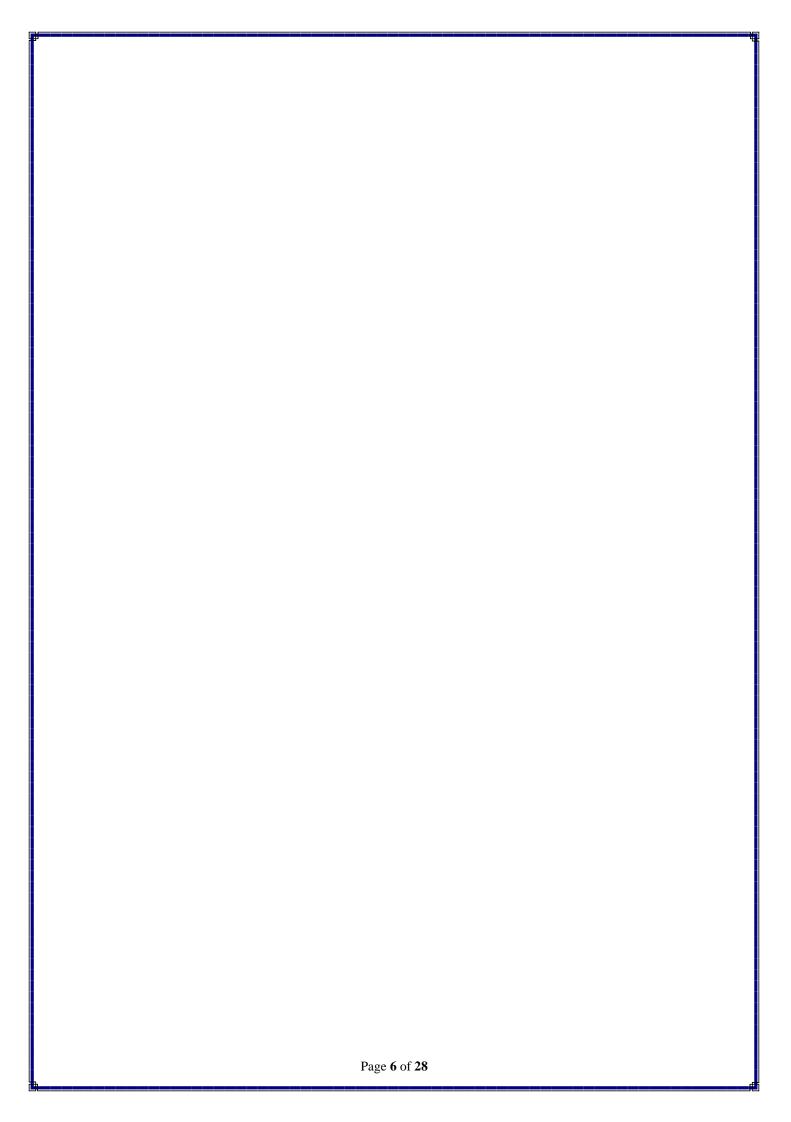
<u>1.4 Sin</u>	nulation Resu	<u>lts:</u>			
			Page 3 of 28		

1.5 Conclusions:	
	Page 4 of 28

Experiment (2) Networking tools and tests

2.1 Objectives

2.2 Equipment / Program Requirements:



2.4 Simulation Results:	
	Page 7 of 28

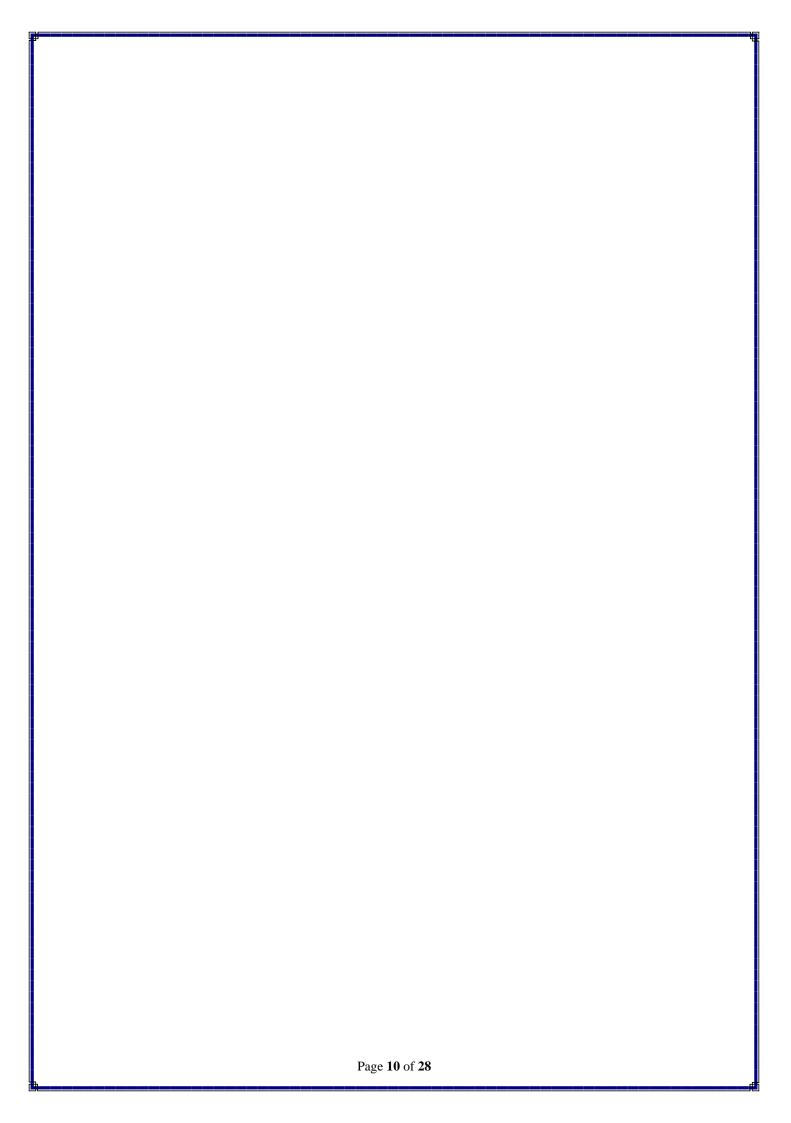
2.5 Conclusions:	
	Page 8 of 28

Experiment (3)

Connection Types (Straight Cable, Crossover Cable, Rollover Cable)

3 1	Ohi	ectives
<u>J.1</u>	<u>UUJ</u>	<u>ccuves</u>

3.2 Equipment / Program Requirements:



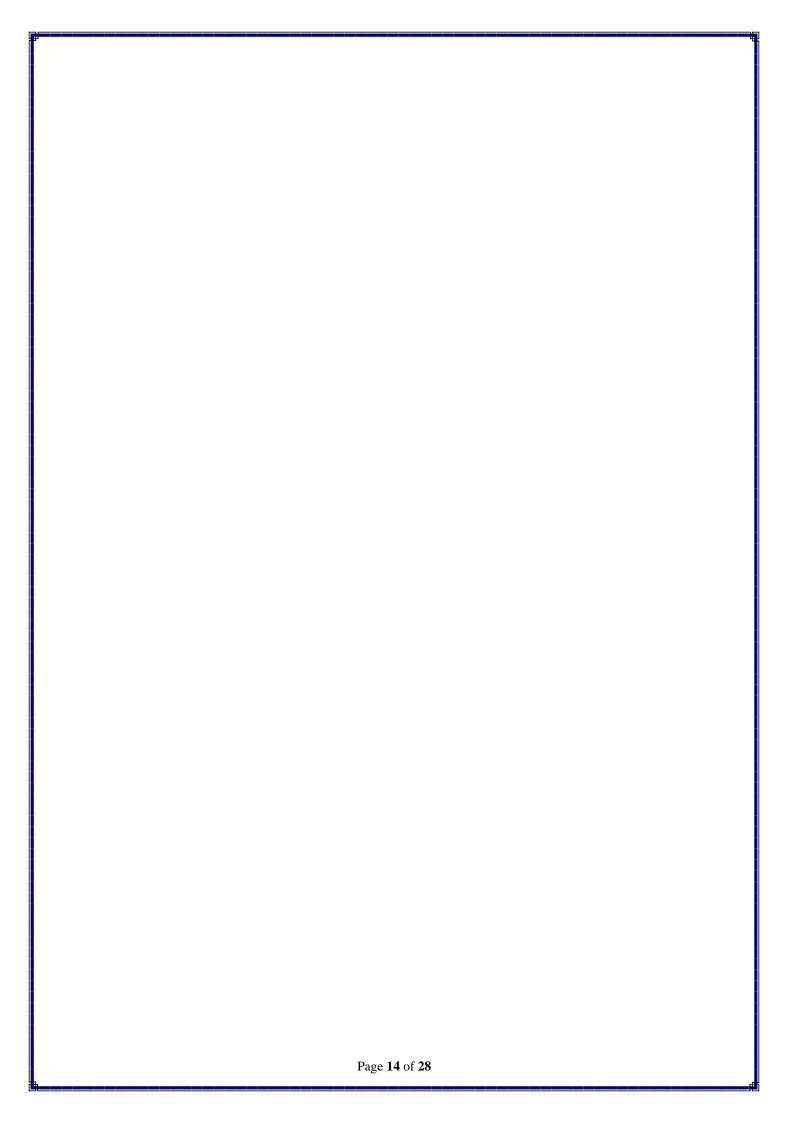
<u>3</u>	.4 Simulation Results:			
		Page 1	11 of 28	

3.5 Conclusions:	<u>!</u>		*
		Page 12 of 28	

Experiment (4) Network Topologies

4.1 Objectives

4.2 Equipment / Program Requirements:

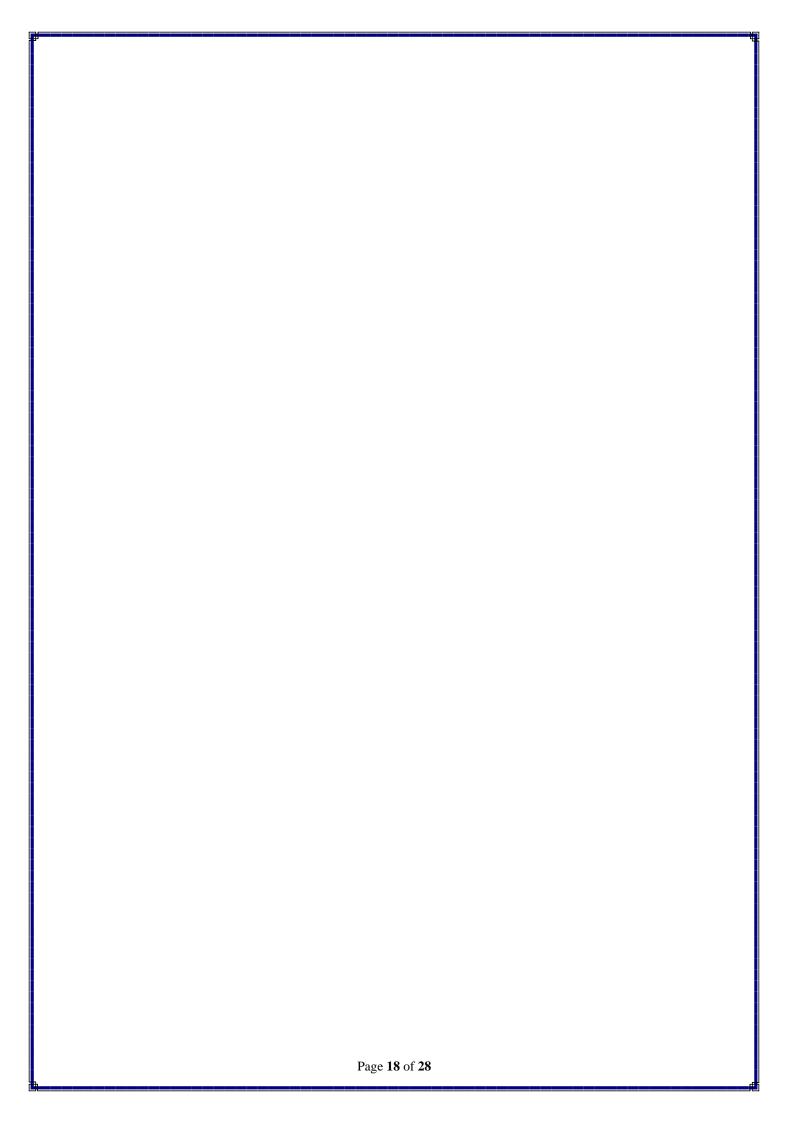


4.4 Simulation Results:		
	Page 15 of 28	

4.5 Conclusions:	·
	Page 16 of 28

Experiment (5) TCP/IP Configuration

5.2 Equipment / Program Requirements:



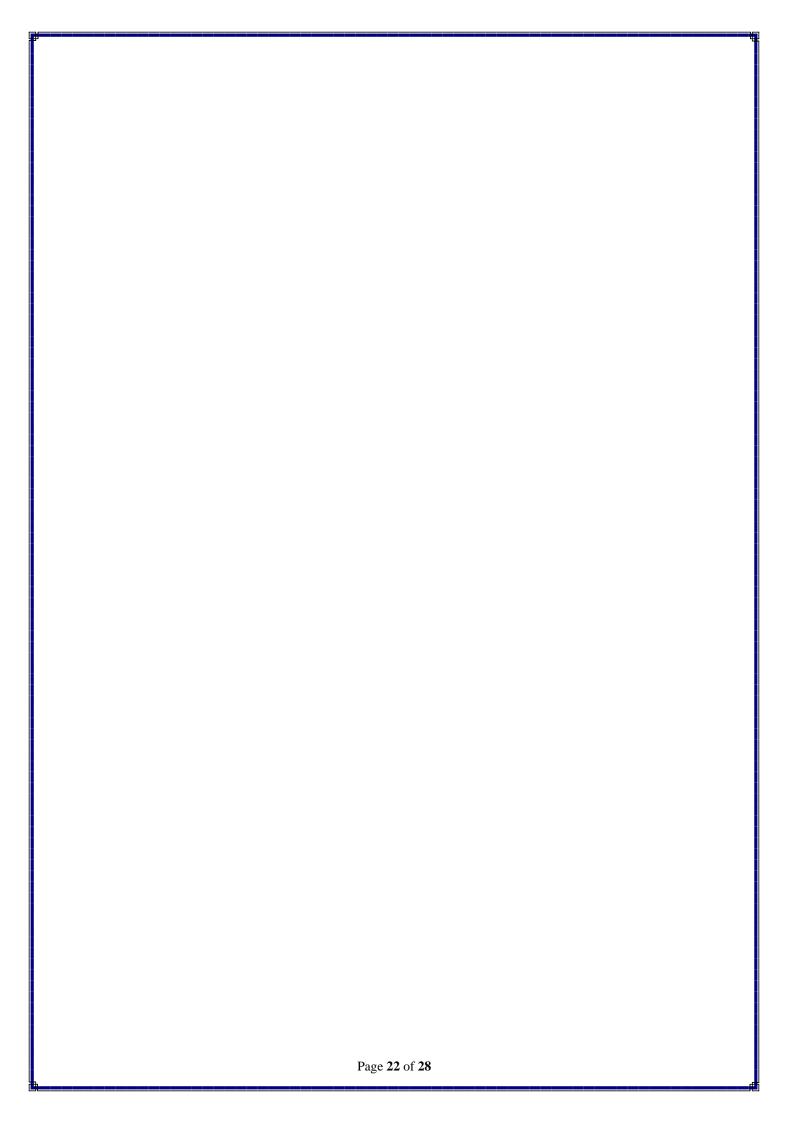
5.4 Simulation Results:		·
	Page 19 of 28	

5.5 Conclusions:	•
	Page 20 of 28

Experiment (6) IP subnetting distribution

6.1 Objectives

6.2 Equipment / Program Requirements:



6.4 Simulation Results:	
	Page 23 of 28

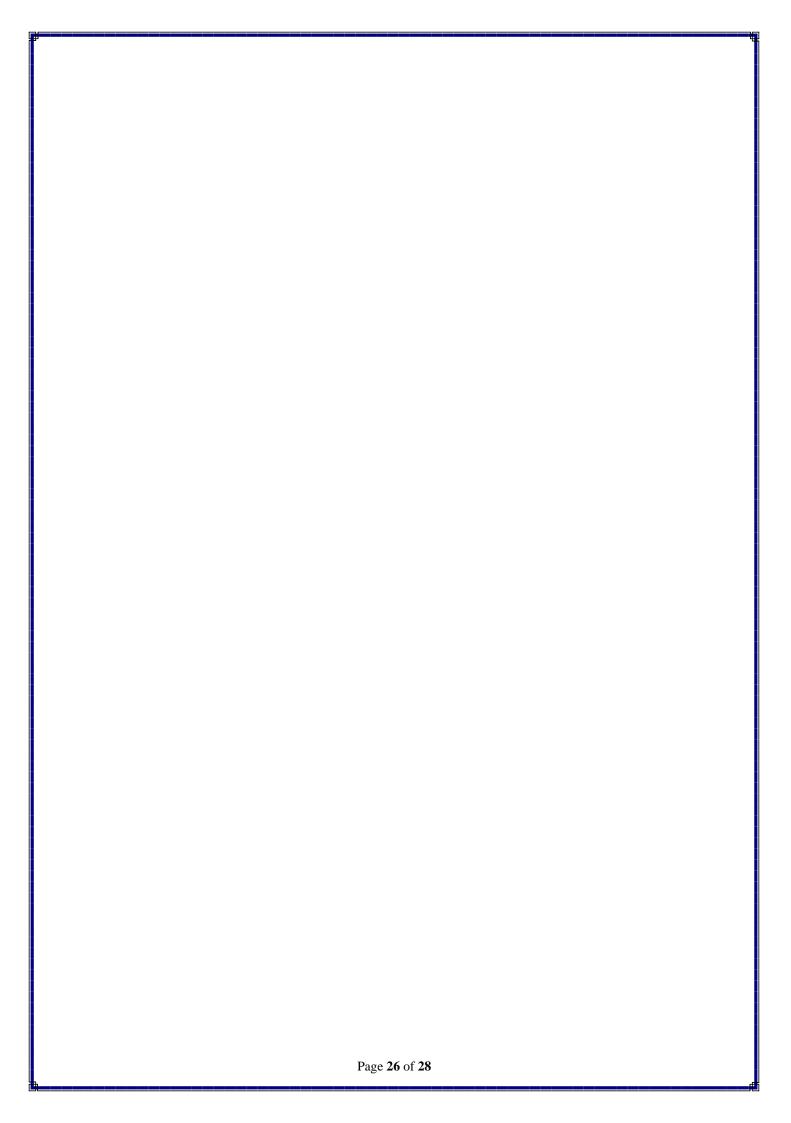
6.5 Conclusions:	
	Page 24 of 28

Experiment (7)

Design and Implementation of an Integrated Network

<u>7.1</u>	<u>Obj</u>	<u>ectives</u>

7.2 Equipment / Program Requirements:



, -	7.4 Simulation Re	esults:			
			Page 27 of 28		

7.5 Conclusions:	
	Page 28 of 28