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Lab. No.	Date	List of Experiment	Total Marks	Signature	Page #
1.		Installing Assembly Language Software (NASM) and getting familiar with its features and operations.			
2.		To perform Addition, Subtraction between two numbers using NASM simulator.			
3.		To perform Multiplication and Division of two numbers using NASM simulator.			
4.		To perform calculations using loops in NASM simulator			
5.		To study the theory of Flag Registers and some of its types.			
6.		Perform addition and multiplication of two numbers by getting values from user using MIPS simulator.			
7.		To store multiple values in an Array using MIPS simulator.			
8.		Open-ended Lab 1	10		
		Mid Term Examination	25		
9.		To perform operations on Floating Points and Double Values using MIPS simulator.			
10.		To perform comparison between numbers and floats using MIPS simulator.			
11.		Using while loop in MIPS simulator.			
12.		Calculating Factorial of a number given by user using MIPS simulator.			
13.		Calculating Average of numbers using MIPS simulator.			
14.		Implement if Statement using Branch			
15.		Open-Ended lab 2	10		
16.		Open Ended Lab Assesment			
		Final Examination	40		

Psychomotor Rubrics for Software based Lab

Course Name (Course Code): _____

Semester: _____

Criteria	Exceeds Expectations ($\geq 90\%$)	Meets Expectations (70%-89%)	Developing (50%-69%)	Unsatisfactory ($< 50\%$)
Software Skills	Ability to use software with its standard and advanced features without assistance	Ability to use software with its standard and advanced features with minimal assistance	Ability to use software with its standard features with assistance	Unable to use the software
Programming / Simulation	Ability to program/ simulate the lab tasks with simplification	Ability to program/ simulate the lab tasks without errors	Ability to program/ simulate lab tasks with errors	Unable to program/simulate
Results	Ability to achieve all the desired results with alternate ways	Ability to achieve all the desired results	Ability to achieve most of the desired results with errors	Unable to achieve the desired results
Laboratory Manual	All sections of the report are very well written and technically accurate.	All sections of the report are technically accurate.	Few sections of the report contain technical errors.	All sections of the report contain multiple technical errors.

Psychomotor Rubrics Assessment Software based Lab

Course Name (Course Code): _____

Semester: _____

Lab #	Score Allocation				
	Software Skills Marks (3)	Programming/ Simulation Marks (2)	Experimental Results Marks (3)	Laboratory Manual Marks (2)	Total Marks (3)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
Total Marks		140	Total Obtained marks		

Overall Score: _____ **out of 14**

Examined by: _____

(Obtained Score / 140) x 14

(Name and Signature of lab instructor)

Affective Domain Rubrics Assessment

Course Name (Course Code): _____

Semester: _____

CATEGORY	Excellent (100% - 85%)	Good (84% - 75%)	Fair (74% - 60%)	Poor (Less than 60%)
Speaks Clearly	Speaks clearly and distinctly all the time, and confidently.	Speaks clearly and distinctly most of the time, but is confused for a brief period of time, however, recovers.	Speaks clearly and distinctly most of the time, but seems not confident about what has been delivered. Shows lack of confidence.	Often mumbles or cannot be understood and clearly lacks confidence in delivering the content
Points:				
Preparedness	Student is completely prepared and has obviously rehearsed.	Student seems pretty prepared but might have needed a couple more rehearsals.	The student is somewhat prepared, but it is clear that rehearsal was lacking.	Student does not seem at all prepared to present.
Points				
Answer back	Student calmly listens to the questions and responds to the question confidently and correctly	Student calmly listens to the questions, responds confidently but some of the responses are incorrect.	Student shows anxiety while listening to the questions, and gives some correct responses, but some of the responses are incorrect.	Student shows anxiety while listening to the questions, and most of the responses are incorrect.
Points:				
Posture, Eye Contact & Speaking Volume	Stands up straight, looks relaxed and confident. Establishes eye contact with everyone in the room during the presentation. Volume is loud enough to be heard by all members in the audience throughout the presentation.	Stands up straight and establishes eye contact with everyone in the room during the presentation. Volume is loud enough to be heard by the audience, but is sometimes not audible.	Sometimes stands up straight and establishes eye contact. Volume is loud enough to be heard by the audience, but many sentences spoken are not clear.	Lazy and informal posture. Does not look at people during the presentation. Volume is also too soft to be heard by the audience.
Points:				

Overall Score: _____ **out of 14**

Examined by: _____

(Name and Signature of lab instructor)

Open Ended Lab Assessment Rubrics

Course Name (Course Code): _____

Semester: _____

Criteria and Scales			
Excellent (10-8)	Good (7-5)	Average (4-2)	Poor (1-0)
Criterion 1: Understanding the Problem: How well the problem statement is understood by the student			
Understands the problem clearly and clearly identifies the underlying issues.	Adequately understands the problem and identifies the underlying issues.	Inadequately defines the problem and identifies the underlying issues.	Fails to define the problem adequately and does not identify the underlying issues.
Criterion 2: Research: The amount of research that is used in solving the problem			
Contains all the information needed for solving the problem	Good research, leading to a successful solution	Mediocre research which may or may not lead to an adequate solution	No apparent research
Criterion 3: Class Diagram: The completeness of the class diagram			
Class diagram with complete notations	Class diagram with incomplete notations	Class diagram with improper naming convention and notations	No Class diagram
Criterion 4: Code: How complete and accurate the code is along with the assumptions			
Complete Code according to the class diagram of the given case with clear assumptions	Incomplete Code according to the class diagram of the given case with clear assumptions	Incomplete Code according to the class diagram of the given case with unclear assumptions	Wrong code and naming conventions
Criterion 5: Report: How thorough and well organized is the solution			
All the necessary information clearly organized for easy use in solving the problem	Good information organized well that could lead to a good solution	Mediocre information which may or may not lead to a solution	No report provided

Open Ended Lab Assessment Rubrics

Course Name (Course Code): _____

Semester: _____

Criteria and Scales				
Excellent (10-8)	Good (7-5)	Average (4-2)	Poor (1-0)	Total Marks 10
Criterion 1: Understanding the Problem: How well the problem statement is understood by the student				
(10-8)	(7-5)%	(4-2)%	(1-0)%	
Criterion 2: Research: The amount of research that is used in solving the problem				
(10-8)	(7-5)%	(4-2)%	(1-0)%	
Criterion 3: Class Diagram: The completeness of the class diagram				
(10-8)	(7-5)%	(4-2)%	(1-0)%	
Criterion 4: Code: How complete and accurate the code is along with the assumptions				
(10-8)	(7-5)%	(4-2)%	(1-0)%	
Criterion 5: Report: How thorough and well organized is the solution				
(10-8)	(7-5)%	(4-2)%	(1-0)%	
Total				(___/5)

Total marks obtained: _____

Name and Signature of lab instructor: _____

Rubrics for Lab Project / CCA

Course Name (Course Code): _____

Semester: _____

Criteria	Exceeds Expectations ($\geq 90\%$)	Meets Expectations (70%-89%)	Developing (50%-69%)	Unsatisfactory ($< 50\%$)
Project Presentation + Project Demonstration	Ability to demonstrate the project with achievement of required objectives having clear understanding of project limitations and future enhancements. Hardware and/or Software modules are fully functional, if applicable.	Ability to demonstrate the project with achievement of required objectives but understanding of project limitations and future enhancements is insufficient. Hardware and/or Software modules are functional, if applicable.	Ability to demonstrate the project with achievement of at least 50% required objectives and insufficient understanding of project limitations and future enhancements. Hardware and/or Software modules are partially functional, if applicable.	Ability to demonstrate the project with achievement of less than 50% required objectives and lacks in understanding of project limitations and future enhancements. Hardware and/or Software modules are not functional, if applicable.
Project Report	All sections of the Project report are very well- written and technically accurate.	All sections of the Project report are technically accurate.	Few sections of the Project report contain technical errors.	Project report has several grammatical/ spelling errors and sentence construction is poor.
Viva	Able to answer the questions easily and correctly across the project.	Able to answer the questions related to the project	Able to answer the questions but with mistakes	Unable to answer the questions

Total marks: _____

Name and Signature of lab instructor: _____



FACULTY OF ENGINEERING SCIENCES AND TECHNOLOGY

Project / CCA Rubric based Assessment

Course Name (Course Code): _____

Semester: _____

Project #	Score Allocation			
	Project Presentation + Project Demonstration Marks (5)	Project Report Marks (3)	Viva Marks (3)	Total Marks (10)
1				
2				
Total Obtained Score				

Total marks obtained: _____

Name and Signature of lab instructor: _____

Final Lab Assessment

Assessment Tool	CLO-1 (20)	CLO-2 (20)	CLO-3 (10)
Lab Manual			
Subject Project / Viva			
Lab Exam / Viva			
Score Obtained			
Total Score: _____ out of 50			

Examined by: _____

(Name and Signature of concerned lab instructor)