

Laboratory Manual

Database Management Systems (CS – 229L)

4th Semester Spring 2025



Student Name:	_____
Student Roll# :	_____ Section : _____

BS in Computer Science
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No.	Course Learning Outcomes (CLOs)	Student Outcomes (SOs)	Bloom's Taxonomy
1	Follow Instructions to specified problem definition for handling operations like searching, insertion, deletion, traversing mechanism on data structures.	PLO_5 (Modern Tool Usage)	P3 (Guided Response)
2	Construct a technical project which involves the entire knowledge of the course.	PLO_4 (Design/ Development of Solutions)	P4 (Mechanism)
3	Demonstrate the knowledge which will be assessed through viva and presentation.	PLO_7 (Communication)	A3 (Valuing)

RELATIONSHIP BETWEEN ASSESSMENT TOOLS AND CLOs:

Assessment Tools	CLO-1	CLO-2	CLO-3
Lab Manual	13 (46.43%)	2 (16.67%)	-
Lab Project	-	10 (83.33%)	5 (50%)
Final Lab Exam	15 (53.57%)	-	5 (50%)
TOTAL	28(56%)	12 (24%)	10 (20%)

GRADING POLICY:

Assessment Tools	Percentage
Lab Manual	15%
Lab Project	15%
Lab Exam	20%
TOTAL	50%

Laboratory Experiments

Lab #	Topics	Signature
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		

Laboratory Rubrics

Criteria	Exceeds Expectations ($\geq 90\%$)	Meets Expectations (70%-89%)	Developing (50%-69%)	Unsatisfactory ($< 50\%$)
Software Handling (2)	Able to use software with its standard and advanced features without assistance	Able to use software with its standard and advanced features with minimal assistance	Able to use software with its standard features with assistance	Unable to use the software
Programming/ Simulation (5)	Able to program/ simulate the lab tasks with simplification	Able to program/ simulate the lab tasks without errors	Able to program/ simulate lab tasks with errors	Unable to program/ simulate
Results (2)	Able to achieve all the desired results with alternate ways to improve measurements	Able to achieve all the desired results	Able to achieve most of the desired results with errors	Unable to achieve the desired results
Lab Report (1)	Laboratory manual has no grammatical and/ or spelling errors. All sections of the report are very well written and technically accurate.	Laboratory manual has very few grammatical/ spelling errors. All sections of the report are technically accurate.	-Laboratory manual has multiple grammatical/ spelling errors. Few sections of the report contain technical error s.	Laboratory manual has several grammatical/ spelling errors and sentence construction is poor. -All sections of the report contain multiple technical errors.

Laboratory Report Score

Lab #	Criteria				Score
1	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
2	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
3	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
4	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
5	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
6	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
7	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
8	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
9	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
10	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
11	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
12	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
13	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
14	Software Handling ()/2	Programming/ Simulations ()/5	Results ()/2	Lab Report ()/1	
Obtained Score out of (140)					
Obtained Score out of (X) = Obtained Score out of (140) /140* X					

Semester Project Rubric

Criteria	Exceeds Expectations (≥90%)	Meets Expectations (70%-89%)	Developing (50%-69%)	Unsatisfactory (<50%)	Score
Project Demonstration (5)	Able 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.	Able 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.	Able 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.	Able 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 results (3)	Able to achieve all the desired results with alternate ways to improve measurements	Able to achieve all the desired results	Able to achieve most of the desired results with errors	Unable to achieve the desired results	
Report Writing (3)	Project report has no grammatical and/ or spelling errors. All sections of the report are very well-written and technically accurate.	Project report has very few grammatical/ spelling errors. All sections of the report are technically accurate.	Project report has multiple grammatical/ spelling errors. Few sections of the report contain technical errors.	Project report has several grammatical/ spelling errors and sentence construction is poor.	
Viva (4)	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	
Obtained Score out of (15)					
Obtained Score out of (X)= Obtained Score out of (15) /15* X					

Laboratory Examination Rubric

Criteria	Exceeds Expectations ($\geq 90\%$)	Meets Expectations (70%-89%)	Developing (50%-69%)	Unsatisfactory ($< 50\%$)	Score
Performance (15)	Able to present full knowledge of both problem and solution.	Able to present adequate knowledge of both problem and solution	Able to present sufficient knowledge of both problem and solution	No or very less knowledge of both problem and solution	
Viva (5)	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	
Obtained Score out of (20)					
Obtained Score out of (X)= Obtained Score out of (20) /20* X					

Final Lab Assessment

Criteria	Score
Laboratory Report (15)	
Semester Project (15)	
Laboratory Examination (20)	
Total Score out of (50)	

Examiner: _____