
LAB COURSE NAME

(CHE 320/CHE323/CHE327/CHE 432/CHE433/CHE434/CHE423)

Experiment title	
Experiment No.	
Experiment date	

By

	Student name	ID	Section
1			
2			
3			

Instructor: Dr. Srinivas Tadepalli

Evaluation sheet (Official use)

Checklist Details		Marks	Marks Deducted	Remarks
Contents Plagiarism in results & discussion part must be < 50%	Cover Page	5		
	Table of Content	5		
	Introduction (Experiment objectives, theory, etc.)	15		± 5 marks, depending on the nature of department/lab
	Experiment Procedure & setup	5		
	Data, Results & calculations	25		
	Discussion and/or Conclusion	20		
	References, Standard, appendix, etc.	5		
	Subtotal	80		Min. 48
Formatting	Text 12 Regular, with Spacing 1.5	4		
	Heading 14 Bold	2		
	Standard Front Type	2		
	Paragraph: Justified	2		
	Figures/Tables/Equations: Numbered, Caption & Cited in text	10		
	Subtotal	20		Min. 12
Total		100		

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1. Introduction

[What is the purpose of performing this experiment? What are you trying to prove or study?]

1.1. Objectives

[What is the significance of the experiment. How it is related to practical problems?]

1.2. Background / Theory

[Explain the theory behind this experiment. Use figures and relevant equations and make sure you provide references for them. If required, discuss the importance of the topic. Remember that the theory is general and not specific to your equipment or lab.]

2. Experiment Procedure and Setup

2.1. Apparatus/device description

[Once the theory has been explained, mention what your experimental apparatus is and what is the method you will use to achieve the objective mentioned above. If needed, show the derivation of equations / formulas that can be used with your apparatus. You may need to provide figures for showing the derivation. **Note that all figures, tables, equations and graphs should be numbered.** For example:

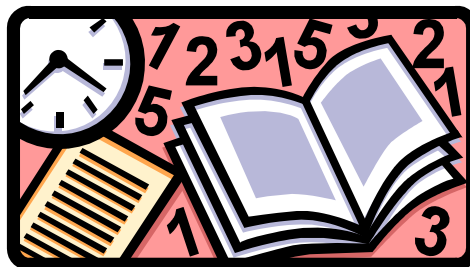
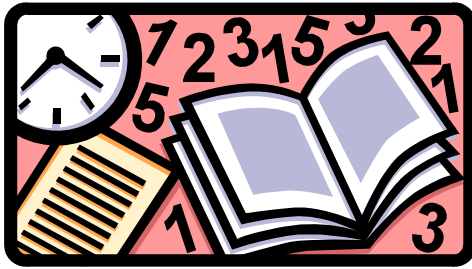
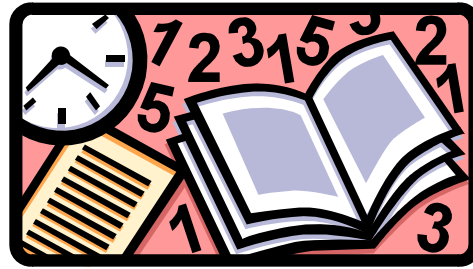


Figure 1: Figure style [1]



(a)



(b)

Figure 2: (a) First picture; (b) Second picture [1]

Table 1: Variation of drag force with the velocity of an object [2]

For equations, it should be in the in a hidden table like this:

$$E = mc^2 \tag{1.1}$$

$$E = mc^2 \tag{1.2}$$

2.2. Procedure

[You may take this from the lab handout provided by your instructor. However, if your instructor asks you to write this yourself, you may reference the equipment manual and write your own procedure. If there are some common mistakes, you may mention some precautions that should be taken to avoid these mistakes.]

3. Results

3.1. Observations

[This is where you will put your raw data. Create your own table of observations or use the example (if provided) by your instructor in the lab handout for this experiment. Put ONLY readings in this section, do not include any calculations! Use the units that are mentioned on the equipment and perform any unit conversions in the next section.]

3.2. Calculations

[Show the formulas and working used to get your results. Make sure you have performed all necessary unit conversions. You can do calculations by hand and attach a separate sheet, or you can type them here using Microsoft Equation Editor. If there are several calculations, you can show some samples and then show the complete results in the next section. Some experiments may require you to calculate % error or % difference.]

[Show your final results here. Use a table if needed and also include any intermediate results if they are important to your analysis. Plot the relevant graphs using Microsoft Excel or by hand.]

4. Discussion / Analysis

[In this section, you should look at your results and graphs and write your comments on what you see. First of all, you should look at each result and judge if it makes sense. For example, a flow rate of $1000 \text{ m}^3/\text{s}$ is quite impossible in any lab. Also, you should try to look for patterns in the numbers and graphs. If something is increasing or decreasing or shows some other kind of pattern, mention this. Look at how the numbers are changing across different readings and (if possible) even within the same reading.

When you see a pattern, ask yourself if this makes sense and is according to what you expected based on the theory. If yes, then your experiment satisfies the theoretical expectation. If no, then think of why your numbers are not matching your expectations. It is possible that you made a mistake in following the procedure, or there is a fault with the apparatus. It is also possible that what you expected is wrong and the results show something else to be the truth. Comment on this.

Also, try to bring values from other sources, like books or research papers that you can use to compare your results with. Always mention the reference for these values.]

5. Conclusion (optional)

[Based on the previous discussion, write the conclusion(s) for this experiment. You should not just say “The experiment was performed and the results were satisfactory”. This is not clear at all. You should mention the behavior of the variables you were studying and if the results were as expected or not. If not, briefly mention what you think might have happened.]

References (Optional)

[All formulas, equations and figures taken from books or other sources should be referenced. Give a reference number to each source and where ever you have used something from that source, write the reference number in square brackets and make it into a superscript like this ^[10]. The meaning of these numbers (i.e. your source) should be listed in this section.]

Appendix (Optional)

[If you have any figures, charts, tables, detailed calculations or other material that are useful for supporting your work, you should attach it here. Not all experiments will require appendices but some may.]