Physics Summative Exam

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Contents

1 Information

The exam will be worth 200 marks total.

The final exam will be on the following topics:

- Unit 1 - Dynamics and Motion
- Unit 2 - Fields
- Unit 3 - Momentum + Energy
- Unit 4 - Light as a Wave
- Unit 5 - Quantum - Bonus

The marks will be distributed as follows:

- Unit 1 - Dynamics and Motion (70)
- Unit 2 - Fields (30)
- Unit 3 - Momentum + Energy (50)
- Unit 4 - Light as a Wave (50)
- Unit 5 - Quantum (20 Bonus Marks)

Mark Distribution Matrix:

like the one mrs beamer shows in the examples

2 Personal Notes

make a seperate and private git repo for this project
200 marks total
4 units total

3 Unit 1 - Dynamics and Motion (70)

3.1 Solve for each of the following (50)

3.1.1 Incline Plane (10)

3.1.2 Elevator (10)

3.1.3 Pulleys (10)

3.1.4 SPWNL (10)

3.1.5 Projectile Motion 1 or 2 (10)

3.2 Theory (6)

3.2.1 What are Newton's Three Laws of Motion? (3)

3.2.2 What is the difference between uniform and non-uniform motion? (3)

3.3 Labs (14)

3.3.1 What is the procedure for the Projectile Motion Lab? (7)

3.3.2 What is the procedure for the Fletchers Trolley Lab? (7)

4 Unit 2 - Fields (30)

4.1 Milikans Oil Drop Experiment (10)

4.1.1 Draw the diagram for this experiment (5)

4.1.2 What is the significance of this experiment? (5)

4.2 Electrostatic Forces (10)

4.3 Electric Field Intensity (10)

5 Unit 3 - Momentum + Energy

6 Unit 4 - Light as a Wave

7 Unit 5 - Quantum (20 Bonus Marks)