

AP PHYSICS C:E&M 2017

Monday, May 8th 2:00PM

Section I: Multiple-Choice

35 Questions 45 Minutes

Includes

Individual questions & questions in sets

Includes

Provided table of common equations & formulas

Section II: Free-Response

3 Questions
45 Minutes

Laboratory Related Questions

May ask you to:

- Analyze data
- Analyze errors
- Design experiments
- Communicate results

SCORING

Multiple-Choice:

50% of final score

Free-Response:

50% of final score

EXAM TOPICS

Electrostatics (30%)

- Charge and Coulomb's law
- Electric fields and potentials
- Gauss's law
- Fields & potentials of other charge distributions

Conductors, capacitors, dielectrics (14%)

- Electrostatics with conductors
- Capacitors
- Dielectrics

Electric circuits (20%)

- Current, resistance, power
- Steady-state direct current circuits with batteries & resistors only
- Capacitors in circuits

Magnetic Fields (20%)

- Forces on moving charges
- Forces on current-carrying wires
- Biot-savart law & Ampere's law

Electromagnetism (16%)

- Electromagnetic induction
- Inductance
- Maxwell's equations