

The student may use notes for the physics final exam or unit test with the following caveats.

1. If the student is taking the final unit test only (just our recent unit test), they are allowed to use one 3x5 card, with notes on one side only.
2. If the student is taking the comprehensive semester final exam, they are allowed to use one ½ sheet of regular paper (5.5 x 8).. with notes on one side only.
3. In either case, the student must use the first portion of the exam period to construct those note cards from scratch (i.e., hand written). Prior to taking the test, using any materials they have brought to class.

What I'm trying to accomplish: I want students to review their text books, in-class notes and lab assignments, identifying "up front" which equations, examples and constants they would like to have access to during the test. they should "book mark", "dog ear", highlight, etc.. any items they would like to use, BEFORE THE EXAM.. (and go through the process of prioritizing which items could be memorized and which items could be written down). Also, the more organized students are in their review time, the more quickly they will be able to transcribe the essential items onto their note card.

What I'm trying to avoid: I know that there are a number of students who, when provided the opportunity, plan on taking the test later in the week with the specific objective of learning from their friends what kind of questions (or, even which specific questions) will appear on the test. They then go and photocopy sections of text, which they then reduce down to size -3 font and place onto microfiche to bring into to test as their "note card".. This is why I don't want students to prepare note cards prior to the test.

Electricity Unit and Final review guide for Physics: Spring 2016.

From Unit 3: Rotating systems and rotational dynamics:

- 7.8 center of mass
- 8.1 angular quantities
- 8.4. Torque
- 8.5 rotational dynamics (Torque = $I\alpha$)
- 8.8 Angular momentum
- 8.9 Vectors to represent rotating systems.

From unit 4: Vibrations and waves:

- 11.1 Simple harmonic motion
- 11.3. The period and sinusoidal nature of SHM
- 11.4 The simple pendulum
- 11.5 Damped Harmonic motion
- 11.6 Forced vibrations, resonance
- 11.7 wave motion
- 11.8 Types of waves
- 11.3 Standing wave, resonance
- 11.6 Mathematical representation of a travelling wave
- 12.1 characteristics of sound
- 12.4 Sources of sound, vibrating strings and air columns
- 12.5 The quality of sound, and noise, superposition
- 12.7 The Doppler effect
- 12.8 Shockwaves and sonic boom

From unit 5: charge, electricity and magnetism.

- 16.1 static electricity
- 16.2 electric charge and the atom
- 16.3 insulators and conductors
- 16.4 induced charge, the electroscope
- 16.5 Coulombs law
- 16.7 The electric field
- 16.8 Electric Field lines
- 17.1 Electric potential difference
- 17.2 Relation between E and Voltage
- 17.7 Capacitance.
- 18.1 Battery
- 18.2 Electric current
- 18.3 Ohms law $V= IR$
- 18.8 Microscopic View of electricity
- 19.1 EMF
- 19.2 Resistors in series and parallel
- 19.3 Kirchoff's rules.
- 19.4 EMF's in series and parallel
- 19.8 Using ammeters and voltmeters
- 20.1 Magnetic Fields
- 20.2 Electricity produces Magnetism

