PHYSICAL SCIENCE - WORK TO BE EXAMINED (2016 TERM 2)

GRADE 10 (1 paper of 200 marks – 3 hours)

CO - Electric Circuits (Topic 16)

- Ions in aqueous solution (Topic 17)

MH - Revision of matter and classification (Topic 1)

- States of matter and the kinetic molecular theory (Topic 2)
- The atom: basic building blocks of all matter (Topic 3)
- The periodic table (Topic 4)
- Chemical bonding (Topic 5)
- Particles substances are made of (Topic 11)
- Physical and chemical change (Topic 12)
- Representing chemical change (Topic 13)

KB - Waves, Sound and Light (term 1)

- Electromagnetic Radiation (term 2)
- Magnetism (term 2)
- Electrostatics (term 2)

GRADE 11 (1 paper of 200 marks – 3 hours)

CO - Gases (Topic 7)

- Energy and chemical change (Topic 12)
- Electrostatics (Topic 9) – remember Newton's law of gravitation (p. 71)
- Electromagnetism (Topic 10)

MH - Vectors in two dimensions (Topic 1)

- Newton's laws and application of Newton's laws (Topic 2)
- Quantitative aspects of chemical change (Topic 8)

KB - Acids and Bases, Redox (Topic13)

Geometric optics (Topic 5)

GRADE 12 – PHYSICAL SCIENCE – WORK TO BE EXAMINED

- 2 X 3 hour papers
- Each paper consists of 150 marks

PAPER 1

1) Momentum and impulse (topic 1)
2) Vertical projectile motion in 1D (topic 2)
3) Work, energy and power (topic 4)
4) Doppler effect (topic 5)
5) Electrodynamics (topic 10)
6) Optical phenomena (topic 11)
7) Newton's laws (1,2,3 and gravitation) (grade 11)
8) Electrostatics (grade 11)

PAPER 2

1) Rates of reactions (topic 6)
2) Chemical equilibrium (topic 7)
3) Acids and bases (topic 8)
4) ELECTRIC CIRCUITS (topic 9)
5) Electrochemical reactions (topic 12)
6) Intermolecular forces (grade 11)
7) Stoichiometry (ie. Mole calculations) (grade 11)
8) Energy and chemical change (Exo, Endothermic) (grade 11)

Note: Electric circuits has been included in PAPER 2 in this exam to ensure a better distribution of marks between the two papers… but it is actually a physics section and therefore will appear in PAPER 1 in the final and trial exams.

The following work from grade 10 and 11 will be included **as per Guidelines document:**

- Newton's laws (including universal gravitation) and applications of the laws
- Electrostatics (ie. Coulombs law and Electric field)
- Electric circuits (Ohm's law, Power and Energy)
- Representing chemical change (ie. Writing balanced chemical equations)
- Intermolecular forces
- Stoichiometry (ie. Mole calculations, empirical formula)
- Energy and chemical change (ie. Exo and Endothermic reactions)