

Colenso's Algebra, part I to end of Quadratic Equations.--Galbraith and Haughton's Plane Trigonometry to end of Solution of Plane Triangles.--Nature and use of Logarithms.

MATHEMATICS.--(Second Year)--Arithmetic, Euclid, Algebra, and Trigonometry as before.--Remainder of Galbraith and Haughton's Plane Trigonometry.--Conic Sections treated Geometrically. (The Parabola as in Drew's Conic Sections, the definitions of the Ellipse and Hyperbola, with the fundamental properties of their tangents, Euclid, Book XI, Props. 1 to 21; Book XII, Props. 1, 2.

The course for the Intermediate University Examination consists of the Mathematics for the first two years, except Conic Sections and Solid Geometry.

MATHEMATICAL PHYSICS AND ASTRONOMY.--(Third Year)--Galbraith and Haughton's Mechanics (omitting chap. 5 of Statics,) Hydrostatics, Optics and Astronomy.

At the Ordinary Examinations, answers to questions in Mechanics, on the Chapters on Friction, Collision of Bodies and Projectiles, will be taken into account only in determining the relative positions of those whose other answers shall entitle them to be placed in the First Class.

EXPERIMENTAL PHYSICS.--(Third and Fourth Years)--1.--Light.--Theories.--Reflection.--Refraction.--Dispersion.--Interference and Diffraction.--Double Refraction.--Polarisation. 2.--Heat.--Dilatation of Solids, Liquids and Gases.--Specific and latent Heat.--Radiation and Conduction.--Mechanical Theory of Heat. 3.--Electricity.--Static and Dynamical; including Electro-Magnetism--Magneto-Electricity.--Thermo-Electricity.--Diamagnetism.--Electric Measurements.--Practical Applications to Telegraph, &c. 4.--Magnetism. 5.--Acoustics.--Theory of Undulations.--Production and Propagation of Sound.--Vibrations of Rods and Plates.--Vibrations of Fluids.--Musical Sounds. Text-Books--Ganot's Treatise translated by Atkinson, and Tyndal on Heat. This Course extends over two years.

The Subjects for the Session 1872-73 are Light and Electricity, Magnetism, and Acoustics.

The Lectures in Mathematical and Experimental Physics will be illustrated by Apparatus.

9. GEOLOGY AND NATURAL HISTORY.

(LOGAN PROFESSORSHIP OF GEOLOGY.)

Professor, J. W. DAWSON, LL.D., F.R.S., F.G.S.

I. BOTANY.--(Second Year.)

(1) *Histology, Morphology and Physiology of the Plant*, or description of its elementary tissues and organs, and investigation of its functions of nutrition and reproduction.

(2) *Systematic and Descriptive Botany*, with special notices of the Flora of Canada, and instructions for collecting and determining Plants, and for the use of the Microscope.

(3) *Geographical Botany*.

Text-Book--Gray's Structural and Systematic Botany.

A Prize of \$20, will be given for the best collection of Plants, and the greatest proficiency in their determination. The prize collections or duplicates of them to remain in the College Museum. Candidates must be Students in Botany of the previous session.*

II. ZOOLOGY AND COMPARATIVE PHYSIOLOGY. (Third Year.)

(1) *General Zoology*, including the Elements of the Histology, and Comparative