

## FOURTH YEAR.

## I.—ORDINARY COURSE FOR GENERAL STUDENTS.

*A. Mineralogy.*

- A, 1. The Physical relations of Mineralogy.
- A, 2. The Chemical relations of Mineralogy.
- A, 3. Descriptive Mineralogy.

*B. Geology, Palæontology, and Physical Geography.*

- B, 1. The Fundamental Principles of Geology.
- B, 2. Palæontology, or the natural history and geological application of organic remains.
- B, 3. Chronological and descriptive Geology.
- B, 4. Physical Geography, or the earth in its present aspect and conditions.

## II.—ADDITIONAL COURSE FOR CANDIDATES FOR HONORS

*A. Application of Trigonometry to the Calculation of Crystal Axes and Angles.**B. Geology of North America, with Rock Formations and Economic Minerals of Canada considered in detail.*

- B, 1. General sketch of American Geology.
- B, 2. Sub-divisions, mineral characters, distinctive fossils, and economic substances, of Canadian rocks.
- B, 3. Connected view of Canadian Geology, shewing the distribution and grouping of the various formations throughout the Province.

(*Books of Reference*—Dana's System of Mineralogy; Dana's Manual of Geology; Lyell's Elements and Principles of Geology; Murchison's Siluria; Pictet's Palæontologie; Geology of Canada, by Logan and Hunt; Johnston's Quarto Atlas of Physical Geography; Synopsis of Professor Chapman's Lectures; Professor Chapman's Examples of the Application of Trigonometry to the Calculation of Crystal Axes).

\* \* \* In addition to these courses, a separate course of elementary and practical Lectures, on the *Minerals and Geology of Canada*, is given during the months of February and March. This course is especially intended to meet the requirements of Provincial Land Surveyors and Mining Engineers.