1. The Elementary Principles of Mineralogy; comprising, more especially, the practical discrimination of Minerals.

(Book of reference-Dana's Manual of Mineralogy.)

2. The Elements of Geology and Palaentology.

(Book of reference-Lyell's Elementary Manual.)

3. The Elements of Physical Geography.

(Book of reference—Johnston's Elementary Atlas of Physical Phenomena, 8vo. edition.)

## II.—ADVANCED COURSE ON MINERALOGY.

In this course the following subdivisions are adopted :-

- 1. The Physical and Chemical Relations of Mineralogy.—
  This division includes the subject of Crystallography, the Classification of Minerals, and other questions constituting the general philosophy of the science. A certain knowledge of the common principles of Chemistry, and of Plane and Spherical Trigonometry, is here desirable on the part of the Student.
- 2. Descriptive and Applied Mineralogy.—Examinations of all the more important or interesting mineral substances that occur in nature, with the industrial applications of these considered in detail.

(Book of reference-Dana's System of Mineralogy, 4th ed.)

## III.—ADVANCED COURSE ON GEOLOGY AND PHYSICAL GEOGRAPHY.

This course is discussed under the following subdivisions:-

 Fundamental Principles of Geology.—A review of the common facts of the science, and of Geological Phenomena in general.