## BOTANY.

## FIRST YEAR.

SATURDAY, MARCH 15TH, 1884.

Examiner,.....PROF. D. P. PENHALLOW, B.Sc.

- 1. Define the principles of classification and point out the essential distinctions between natural and artificial systems, as also the advantage of each.
- 2. State what you can concerning the proper method of collecting and preserving plants.
  - s. Plant food: Its source, general character and function.
- 4. Assimilation: Describe the process, together with the most important and characteristic chemical changes. Also state what are the resulting products.
- 5. Metastasis: The nature of the process, the characteristic chemical changes, resulting products and distinction from assimilation.
- 6. Fruit of Phenogams: State its morphological character; give a simple classification, and state reasons for the various morphological distinctions made.
- 7. The seed: Its origin, parts, function and special provision for nutrition of the young plant.
- 8. Describe the physical conditions essential to the promotion of assimilation, and show how this function may be varied by change of conditions.
- 9. Kosace, Ranunculaces, Anacardiaces: Describe the general habit of growth; state if injurious or useful, and in what respect, and mention some useful Canadian members, if possible.
- 10. Leguminosae, Compositae, Sapindaceae: State where these families are chiefly found; for what they are chiefly useful, and give examples of Canadian species of value.

## HISTOLUGY.

## FIRST YEAR.

MARCH 15TH, 1884.

Examiner,......PROP. OSLER, M. D., F.R.C.P. LOND.

Describe the structure

- (1). Of the mucous membrane of the bladder, of a bronchus and of the nose;
  - 2. Of a liver lobule;
  - 3. Of the grey matter of the spinal cord.

Oral and Practical.

Monday, March 17th. In the Laboratory, 1 to 5 p.m.