

2. Draw a *leaf* answering to the following description :—*cordate, margin serrate, apex acute.*

Describe fully the structure of *apple fruit* or *pome.*

4. What are *root stocks*, and how may they be distinguished from true roots?

5. Name Canadian plants that bear :—*bilabiate corollas, catkins, podix, samara drupe.*

PROFESSIONAL EXAMINATIONS.

FIRST YEAR.

BOTANY.

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

1. Explain the process of nutrition.
2. Explain the physiological movement of water and its relation to growth.
3. Explain respiration.
4. Compare the functions of Metastasis and Assimilation.
5. Explain the functional value of Antherozoids, Embryo Sac, Archegonium and pollen grain.
6. Explain the functional value of the Prothallus, and show its equivalent in the Phenogams.

PHYSICS.

Examiner..... G. P. GIBBON, M.I.

1. Describe the physical properties of matter.
2. What are the different conditions in which we find matter, and the causes which modify them?
3. Describe the physical and chemical properties of the atmosphere.
4. Show the relation between specific heat, atomic heat, and latent heat.