36. Enumerate the chief nitrogenous and non-nitrogenous substances which are found in plants.

37. Fill in the accompanying Floral Schedule with a full and accurate description of the specimen under observation.

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1. Describe the germination of a plant.

2. Explain the differences in the structure of the embryo.

3. Explain the functions of the Root.

4. Describe the structures in a leaf, and explain their action on the air.

5. Mention the several parts of the stamen and the pistil, and explain their uses.

6. Describe an Achene, a Samara, a Drupe, and a Silique.

7. Describe the differences in the stems of Exogens and Endogens, and the relations of these to the other parts of the plant and to classification.

8. Explain the terms Genera, Species, Order.

9. What is an excurrent stem, an axillary bud, bud scales?

10. Explain the terms *primordial utricle*, *parenchyma*, *protoplasm*, as used in Botany.

11. What are the functions of the nucleus in a living cell?

12. Explain the movements of the sap in plants.

13. Describe the appearance under the microscope of *raphides*, *spiral vessels*, and *disc-bearing wood-cells*.

14. Describe the structure of the bark of an Exogen.

15. Describe freely the anatomy of a leaf.

16. Describe shortly the parts and structures denoted by the following terms: *spine*, *aërial root*, *phyllodium*, *cambium*, *stipule*, *rhizoma*.

17. Give examples of *phænogams*, *cryptogams*, *exogens*, and *endogens*, properly arranged.

18. Describe the principal forms of indeterminate inflorescence.

19. In what natural families do we find *siliques*, *didynamous stamens*, *labiate corollas*, or *pappus-bearing achenes*. Describe these structures.

20. State the characters of any Canadian exogenous order, with examples.

21. Describe the cell-walls in a living parenchymatous cell.

22. Describe the fibro-vascular tissues in an Exogenous stem.

23. Describe the appearance of stomata and glandular hairs under the microscope.

24. Define *prosenchyma*, *corm*, *cyclosis*, *thallus*.