

**Scientific Agriculture.*

1. State the organic elements of plants and their principal sources is nature. (10)
2. State the composition of the principal substances produced by plants. (10)
3. Name the inorganic substances found in plants, and state the relations of different plants to each other in this respect. (10)
4. How may soils be classified as to their texture? (10)
5. How in reference to their most abundant ingredients? (10)
6. Which of their less abundant ingredients are most important, and why? (10)
7. What are the uses of the organic part of soils, and in what state does it exist? (10)
8. What are the uses of draining and subsoiling? (10)
9. In what are run-out soils usually deficient? (10)
10. State the circumstances in which gypsum, lime, bone earth, and alkalis are likely to benefit the soils (10)

 THE A. A. EXAMINATION.

The results of the examination for the certificates of Associate in Arts were declared in the Molson Hall, McGill College, on June 19th. Short addresses were made by Principal Dawson, Canon Norman, Professors Murray, Cornish, Chandler and Darey. The following were some of the points that called for notice in the examination. Though the number of candidates and of competing schools had increased, the standard had risen; the examination was on the whole better than that of previous years. We observe, however, that, as compared with last year, both the highest and the lowest marks are lower. The highest marks for the Associate in Arts in 1881 were 1107; in 1882, they were 1072: the lowest marks in 1881 were 535; in 1882, 526. The High School had for once been beaten, the boy taking the first place belonging to the McTavish School. The Greek paper was on the whole better done than the Latin, though very few took the subject up. The translation was good all round, but the grammar wanted improving. Great improvement was observed in Reading, and the Dictation was very well done. Geology had been taken up for the first time, but by one pupil only. While the Chemistry papers wanted improvement, Botany was well done. The following table

* N. B.—It is optional with candidates to take either Natural Philosophy or Scientific Agriculture.