

3. State the law respecting the morphological nature of the floral organs, in a seed plant, and give proof.
4. Give a concise account of Protoplasm as to its (a), physical characteristics; (b), chemical nature; (c), behavior under external irritation.
5. Describe fully, the process of respiration in plants, and show in what respect it differs from the same function in animals.
6. Show the original source of carbon in the animal body, and explain how it is obtained and by what process it is prepared for animal nutrition.
7. Give an explanation of the way in which food is taken from the soil by plants and transferred to the digestive tract.

PHYSIOLOGY.

Examiners..... { WESLEY MILLS, M.D.
W. S. MORROW, M.D.

1. Illustrate the bearing of General Biology and Embryology on the study of Physiology.
2. Compare blood and lymph, and discuss the relations between the blood-vascular and the lymphatic system.
3. Consider the various factors that enter into the maintenance of the circulation.
4. Describe the action of the heart, and explain how this organ is made adaptive.
5. Compare the inspired air and the expired air, and explain the causes of the changes.
6. Write on *one* of the following subjects:—(a) The most important features of the Anatomy and Physiology of the spinal cord; (b) of the eye; (c) of the ear.
7. Describe in detail some experiment you have seen or performed, and state the conclusions to be drawn from it.

SECOND YEAR EXAMINATIONS.

PHYSIOLOGY.

Examiners..... { WESLEY MILLS, M.D.
F. G. FINLEY, M.D.

1. Describe the nutritive and respiratory relations (a) of the embryo chick and (b) of the embryo mammal.
2. Indicate the relations between food, blood, lymph and metabolism generally.
3. Describe experimental asphyxia and explain briefly the causation of each phase as regards both the circulatory and the respiratory system.
1. Give a general outline of digestive processes, comparing different animals. Discuss critically digestion in its relations to absorption, etc.