OFFICIAL.

The following Regulations supersede those formerly in force respecting the JOURNAL OF EDUCATION:—

I—The JOURNAL OF EDUCATION *shall hereafter be published semi-annually, in the months of April and October respectively, and shall continue to be the medium of Official Notices in connection with the Department of Education.*

II.—The JOURNAL *will be furnished gratuitously, according to law, to each Inspector, Chairman of Commissioners, and Board of Trustees, and will be supplied to other parties wishing it at the rate of ten cents per copy*

III—Each Secretary of Trustees is instructed and required to file and preserve the successive numbers of the JOURNAL *for the benefit of his fellow Trustees and the Teacher or Tea hers of his section, and their successors, and to inform his associates in office and the Teacher or Teachers of its receipt, so soon thereafter as may be convenient.*

EXAMINATION PAPERS,

Set for Candidates for Provincial Licenses.

JULY, 1891.

ACADEMIC LICENSE (Grade A.)

ALGEBRA.

1. If the first term of a Geometric series be a and the last term be l, the number of terms being odd, what is the middle term in terms of a and l?

2. Two towns on a uniformly flowing river are 27 miles apart. A steam-boat takes an hour and a half on its downward trip from one town to the other, and a row-boat three hours. The steam-boat returns against the stream in one-tenth of the time that the row-boat takes. Required the velocity of the river and the speed of the boats in still water.

3. By the principle for solving indeterminate equations show in how many ways a debt of $2 can be paid with 3-cent and 5-cent pieces.

4. Write the 7th and 10th terms of the expansion of $(a^2 - b^2)^{\frac{2}{3}}$.

5. Solve the equations,

$$x^3 + y(xy - 1) = 0.$$
$$y^3 - x(xy + 1) = 0.$$

6. When a and b are unequal, show that $a^2 + b^2$ is greater than $2ab$.

7. State and prove an important principle suggested by the equation.

$$x + \sqrt{y} = \sqrt{b}$$

GEOMETRY.

1. If a straight line touch a circle, and from the point of contact a straight line be drawn cutting the circle, the angles made by this line with the line touching the circle must be equal to the angles which are in the alternate segments of the circle.

2. Squares are described on the three sides of a right-angled triangle; divide the square on the hypotenuse into two rectangles which shall be respectively equal to the squares on the other sides.

3. The rectangle contained by the diagonals of a quadrilateral inscribed in a circle is equal to the sum of the rectangles contained by its opposite sides.

4. In a given triangle ABC, the perpendiculars AD, BE, drawn from two vertices to the opposite sides, meet in a point O, and AD meets the circle circumscribed to the triangle in a point K; prove that DK is equal to DO.

5. Triangles which are equal in area, and which have one angle of the one equal to one angle of the other, have their sides about the equal angles reciprocally proportional. Conversely, triangles which have one angle of the one equal to one angle of the other, and the sides about these angles reciprocally proportional, are equal in area.

6. Given the base of a triangle and the ratio of the other sides, to find the locus of the vertex.

7. If two straight lines be parallel, and one of them be at right angles to a plane, the other must be at right angles to the same, plane.

SCHOOL SYSTEM AND SCHOOL MANAGEMENT.

1. State how the County Fund is, (1) determined and levied and, (2) distributed.

2. Give the substance of the law and regulations regarding the formation of new School Sections.

3. State fully the conditions and scale according to which grants are payable to County Academics.

4. State generally the principles to be followed in the allotment of time for the several subjects of instruction, and make a weekly allotment for the subjects included in the High School Course, First Year.

5. Give a concise account of the educational theories of Jacotot, with a discussion of some of his "paradoxes."

TEACHING.

1. What are the chief ends aimed at in the study of the ancient classics? Discuss how far these ends may be attained by the study of English authors?

2. "All true education rests on a psychological basis." Explain and discuss this statement.

3. Explain (as on a blackboard to a class) the meaning and process of *rationalizing the denominator*.

4. Describe the methods by which you would train your pupils to the habit of correct expression.

5. Give a short sketch of an introductory lesson on Compound Proportion to a class that has mastered the principles of ratio.

PHYSIOLOGY.

1. Describe the working of the heart.

2. What are the sweat-glands? How are they distributed, and how controlled?

3. Name and give examples of the different kinds of joints.