New Series.

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OFFICIAL.

The following Regulations supersede those formerly in force respecting the Journal of Education:-

The Journal of Education shall hereafter be published 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 bene-fit of his fellow Trustees and the Teacher or Teachers 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, 1884.

ACADEMIC LICENSES (Grade A.)

[Candidates are at liberty, as per Syllabus of Examination, to write on such two of the three subjects given below as they may choose. No credit will be given to papers on all subjects from the same candidate.]

CHEMISTRY.

- 1. Define and explain the terms "Simple Bodies" or "Elements" and "Compound Bodies." Give examples of each, and give the number of Elements so far known.
- 2. Detail an experiment for determining the composition of Water by weight.
- 3. Distinguish between Acids, Alkalies and Salts. Show how Calcium Chloride is made, and what takes place when a solution of it is mixed with one of Sodium Carbonate.
- 4. Describe the construction of an oxyhydrogen blow-pipe, and mention some of its effects.
 - 5. Discuss the analogies of the Chlorine group.
- 6. Write a note on Silver, its sources, mode of extraction, and its properties.

NATURAL PHILOSOPHY.

- 1. What is meant by the moment of a force about a point? State the principal properties of moments.
- 2. What is meant by saying with reference to gravity, g=32? How do you find the position of a particle projected horizontally and allowed to fall under the action of its own weight? A cannon ball is fired horizontally from a hill 900 feet high on the coast. Find the time which elapses before it strikes the sea, neglecting the resistance of the atmosphere.

- 3. Define fluid. Explain the principle which enables us to find the specific gravity of a body by weighing it in water, and describe Nicholson's hydrometer.
- 4. Describe the siphon, and explain why it cannot be used to convey water from a lower to a higher level.
- 5. What is meant by the focal length of a convex lens? Show how to find it (1) by aid of the sun, (2) by an artificial flame.
- 6. State the relation between the pressure and volume of a gas at a given temperature, called Boyle's or Mariotte's law. Give a proof of the law.

FRENCH.

Translate into English:

C'est une chose, moi, où je ne consentiral point. Les alliances avec plus grand que soi sont sujettes toujours à de fâcheux incovénients. Je ne veux point qu'un gendre puisse à ma fille repocher ses parents, et qu'elle ait des enfants qui aient honte de m'appeler leur grand'maman.

grand'maman.

S'il fallait qu'elle me vint visiter en équipage de grande dame, et qu'elle manquât par mégarde, à saluer quelqu'un du quartier, on ne manquerait pas aussitôt de dire cent sottises. Voyez-vous, dirait-on, cette dame la marquise qui fait tant la glorieuse. C'est la fille de Monsieur Jourdain, qui était trop heureuse, étant petite, de jouer à la madame avec nous. Elle n'a pas toujours été si relevée que la meille de contra constant par la madame avec nous. voilá; et ses deur grands'pères vendaient du drap auprès de la porte Saint-Innocent.

Ils ont amassé du bieu à leurs enfants, qu'ils payent maintenant peut-être bien cher en l'autre monde; et l'on ne divient guère si

riche à être hondêtes gens.

Je ne veux point de tous ces caquets, et je veux un homme, en un mot, qui m'ait obligations de ma fille, et à qui je puisse dire: Mettezvous là mon gendre, et dinez avec moi.

- 1. When do vingt and cent take a? Give examples.
- 2. Parse puisse, manquât, l'on ne devient . guère.
- 3. Give in full the imperfect indicative of appeler, the future of falloir, and the present subjunctive of vouloir.
- 4. Divide the tenses of the French verb into primitive and derivative, and give the rules for the formation of the latter from the former.

Translate into French:

Are you ill? What o'clock is it? It is twelve o'clock. I shall go to the country to-morrow. Gentlemen, I thank you for your kindness. Wait for me, if you please. Write a letter to your friend. A man walked twenty miles in a day. Do you understand the French language? What is the matter with you this morning? My head aches. What kind of weather is it to-day? It is snowing. My friend will be here in half an hour. Here he is now. It is very useful to understand music. Is your eister at home? Everyone believes it. Come in, I wish to speak with you.

GEOMETRY.

- 1. Describe a rhombus which shall be equal to a given triangle. and have each of its sides equal to one side of the triangle.
- 2. In an obtuse-angled triangle, if a perpendicular be drawn from either of the acute angles to the opposite side produced, the square on the side subtending the obtuse angle is greater than complete the enunciation, and prove.
- 3. Describe a circle that shall pass through two given points, and touch a given circle.
- 4. If a verticle angle of a triangle be bisected by a straight line which also cuts the base, the segments of the base must have the same ratio which the other sides of the triangle have to one another.

Also state and prove the converse.