

Sig: Unam omnibus duabus horis diarrhœa perstante.

MISS A. D. CHAMBERS.

4. B. Extracti. Bellad 5ss 16
Acid. Tannici.....gr. xx
Vaselini.....q. s. 3i

Misce et Fiat unguentum.

Sig: Applicat. ter in die more dictu.

MRS. JOHN WESTCOTT.

5. B. Emp. Cantharides, q. s. 22

Fiat vesicatorium super emplastrum adhesivum extendendum pro post aurem sinistram.

CHEMISTRY.

Examiner:—B. JACKES. Time Allowed 2 HOURS.

1. Write a short account of the chemistry of Nickel, pointing out its relations to Fe. Co. and Manganese. 11
2. Describe the action of the common acids on Lead, and state what difference of action river water and distilled water has on Lead, and why? 9
3. Point out the resemblance between Nitrous Oxide and Oxygen, and explain how they may be distinguished by chemical and physical tests. 10
4. A Silver Salt is said to contain C 14.37, H 1.79, Ag 64.68, O 19.16. Find the formula of the acid. 10
5. Give different reactions for obtaining N from its compounds, and give tests to prove the gas is N. 9
6. State the general methods for obtaining the atomic weights of Elements; give an account of determining that of Zinc. 11
7. Explain the process of manufacturing Sulphuric Ether, giving chemical equations. 10
8. How may NH_3 be prepared (a) by synthesis, (b) from HNO_3 , (c) from Ammonium Salts? Give equations. 10
- *How much Nitrous Oxide measured at a temperature of 60°C . and a pressure of 760m.m. Bar. may be obtained from 100 grammes of Ammonium Nitrate? (Give work.)
- *The contents of a stomach are supposed to contain poison; describe briefly how you would conduct the analysis.
- 9 and 10. Oral examination and recognition of samples. 20

*The two unnumbered questions may be substituted for numbers 7 and 8, if so desired by the students.

MATERIA MEDICA.

Examiner—J. TOLBERT PEPPER. Time Allowed—2 HOURS.

1. (a) What are Volatile Oils? (b) Name the two most important classes of volatile oils. (c) Of what two principles do volatile

oils proximately consist? (d) What is the most characteristic feature of volatile oils? (e) Describe two methods by which volatile oils may be obtained, with an example of an oil obtained by each process. (f) How may the adulteration of volatile oils by a fixed oil be detected? (g) How may the presence of Alcohol be shown? (h) What is the source of Oil of Origanum? (i) What is the chemical synonym for Oil of Wintergreen? (j) Give its official name. (k) Give the botanical name of the plant yielding it. (l) From what other plant is much of the Oil of Wintergreen of commerce obtained? (m) Do these oils differ greatly in properties and composition? (n) What Acid may be prepared from it? (o) What is the most common adulterant of Oil of Wintergreen, and how may it be detected?

2. Describe the microscopic appearance of a cross section of Honduras Sarsaparilla Root, and Senega Root. 10
3. (a) What is Camphor? (b) Give the botanical name of the plant. (c) Give the habitat. (d) State the part from which it is obtained, and how? (e) How is it purified? (f) What is the difference between Camphorated Oil and Oil of Camphor? (g) How may Camphor be powdered? (h) With what other crystalline substance does Camphor become liquid? (i) What are the medicinal properties of Camphor? (j) Name B. P. preparations containing Camphor. 20
4. (a) Give the botanical name of the plant that produces Coca. (b) Where does it grow? (c) How can you distinguish the leaves from other leaves? (d) What are its active principles? 6
5. (a) What is a poison? (b) What is an antidote? (c) What is meant by a counterpoison? (d) Name a poison and its antidote. (e) Name a poison and its counterpoison. (f) What alkaloids are obtained from Nux Vomica? (g) Give symptoms of poisoning by the principal one and the antidote. (h) How would you distinguish one from the other by chemical means? 12
6. Zingiber.—(a) Name the chief commercial varieties. (b) Where do they grow? (c) What part of the plant is used? (d) Name the chief constituents of the drug. (e) What are its medicinal properties? (f) What menstruum is generally used for extracting its medicinal constituents, and why? (g) Name the

B. P. preparations into which it enters.

7, 8, 9 and 10. Oral examination and recognition of specimens.

[The paper on Practical Chemistry had not been received up to time of going to press.—Editor.]

Notes.

R. M. Johnson, who secured one of the prizes offered by Merck & Co., and mention of which is made elsewhere in this issue, attended the O. C. P. course of 1892-93, graduated May, 1893, took first class honors at the University of Toronto examination for degree of Phm. B.

John T. Shapter, who for many years was the senior partner of the firm of Shapter & Jeffroy, Toronto, died at his home at the corner of Springhurst Avenue and King street, on Tuesday morning, May 8th. at the age of 72 years.

W. Grant, a graduate of the O. C. P. of the Autumn Term of 1886, and the popular representative of the firm of Messrs. Lyman Bros. & Co. for a number of years past, has recently accepted a position with Messrs. Parke, Davis & Co. The latter firm and its new representative are both to be congratulated.

A fire in the building opposite the drug store of T. N. Sampson, Dundas street, Toronto, was so intense as to crack four large plate glass windows in his store.

The Gottingen Prizes.

The Philosophical Faculty of the University of Gottingen have just announced the particulars of the Beneke prizes for 1897. They say that, in view of the recent researches of Van 't Hoff and Roozeboom on solutions, and the similarity between many of the phenomena observed with solutions (liquid) and mixed crystals, the term solid solutions may, perhaps, be used for many of these bodies. The prizes will, therefore, be awarded for the best research on this subject. The theses must be sent in by August 31st, 1896, and may be in German, Latin, French or English. They must be marked in the usual way with a motto, and the motto and name must be enclosed in a sealed envelope. The first prize will be £170 (3,400 marks), and the second will be £35 (680 marks). The award will take place on 11th March, 1897, the birthday of the founder of the prizes.—*Apotheker Zeitung*.

TO CLEANSE HYPODERMIC SYRINGE POINTS.—If you cannot pass a fine wire through, heat the points; this will burn out all foreign substances. Should a wire be rusted in, then dip the point into oil and heat—this will enable you to pull out the wire; force oil into the point and heat again, and you can remove all traces of rust. Wash with alcohol.—*Zentralblatt für Pharmazie*.