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AN ROINN OIDEACHAIS

(Department of Education).

BRAINSE AN MHEADHON-OIDEACHAIS

(Secondary Education Branch).

LEAVING CERTIFICATE EXAMINATION, 1925

PASS

CHEMISTRY.

TUESDAY, 23rd JUNE.—MORNING, 10 A.M. TO 12 NOON.

[All six questions may be attempted.]

1. Describe the preparation of nitrous and nitric oxides. How may the volume composition of nitric oxide be determined?

2. How may chlorine gas be prepared? Describe its properties. How may the presence of a chloride in solution be detected?

3. Explain the chemical changes that occur in the laboratory preparation of sulphuric acid. Describe the preparation and properties of any two sulphates.

4. Give as fully as possible the evidence to prove that water is composed of hydrogen and oxygen.

5. Explain the meaning of (a) the law of reciprocal proportions, (b) the equivalent of a metal. How may the equivalent of magnesium be determined?

6. How much caustic soda must be added to an excess of hydrochloric acid to produce 100 grams of common salt? How would you verify your answer by experiment?

(Na = 23. Cl = 35.5. O = 16. H = 1.)