

126 SYNOPSES OF LABORATORY COURSES

C. *Ethereal Sulphates* are found by taking the difference between the total sulphates and the inorganic sulphates.

D. *Total Sulphur in Urine* (Benedict).—Reagent : Crystallised copper nitrate 200 grms., potas. chlorate 50, water to 1 litre.

10 c.c. urine and 5 c.c. reagent in evaporating dish. Evaporate to dryness on water bath ; place on triangle, gradually heat with small flame until black and dry, holding burner in hand. Then heat to redness for 10 minutes after it has become dry. When cool add 20 c.c. HCl (reagent bottle), warm until completely dissolved ; transfer with rod to Erlenmeyer flask, dilute 100 to 150 c.c. with washing of dish ; add 10 c.c. barium chloride solution slowly ; allow to stand one hour, filter barium sulphate, and weigh as before.

Difference between A and D is " Neutral Sulphur " ; calculate both to SO_4 ions.

Tabulate the results obtained from analysis of the sulphur compounds in the sample of urine.

IV. *Chlorides* (Volhard).—For method see Clinical Chemistry, Period VIII.

THIRD LABORATORY PERIOD

URINE

NITROGENOUS EXCRETION

I. *Total Nitrogen in Urine* (Kjeldahl). (Hawk, p. 401).

Principle : The nitrogen of most organic substances