

ADVANCED BIOLOGICAL CHEMISTRY 133

the urine in terms of acetone. Calculate this to diacetic acid.

(Sets of apparatus for these determinations are to be set up in private laboratory.)

2. *Fæces*.—The moisture is determined by drying at low temperature under reduced pressure in specially constructed vessels.

Determine the total nitrogen in the sample of dried fæces. Weight about one to two grammes from a weighing bottle by difference. Calculate the nitrogen proteins by the factor 6.25.

SEVENTH LABORATORY PERIOD

STOMACH CONTENTS

1. Determine the *total acidity* of 10 c.c. filtered stomach contents—titration with phenolphthalein and decinormal NaOH. (See Clinical Chemistry, X.)

2. Determine *free HCl* with another 10 c.c. of same solution, using tropaolin oo; 2nd, using Töpfer's reagent.

3. Take 10 c.c. same solution, titrate to end point for HCl, using Gunzberg's reagent as outside indicator, as follows: Place cupped porcelain plate on top of water bath, boil water until plate is hot, evaporate to dryness, one drop of the reagent in each cup. Keeping plate hot, add 1 drop stomach contents to dry reagent in cup; observe red salt left after evaporation; add standard alkali, test after each c.c. until reaction ceases.