

process. Calculate the percentage of protein, using the factor 6.25.

3. *Carbohydrates*.—Weigh carefully about 1 grm. of the dried bread. Place in a 200 c.c. flask; add about 60 c.c. of dilute sulphuric acid (2 per cent.). Fit the flask with a reversed condenser, and boil gently for two hours. Filter the contents into a 100 c.c. graduated flask, rinse the original flask twice with a few c.c. of water, pass these through the filter, and wash the filter until the solution and washings reach the containing mark. Mix and determine the glucose present by Benedict's method. The starch in the bread corresponds to nine-tenths of the glucose found.

Calculate the food value of a kilo. of this fresh bread allowing 1.2 per cent. of fats.

Approximate percentage composition of bread and milk :—

	Water.	Carbohydrates.	Proteins.	Fats.	Salts.
Milk	87	5.0	3.3	3.0-4.0	0.7
Bread	35	53.0	9.5	1.2	1.2

ELEVENTH LABORATORY PERIOD

BLOOD

1. *Quantitative Estimation of Urea*.—Use MM. Ambard and Hallion's apparatus. (See Part II, Urine.) Great care must be taken to exclude error when determining the urea in blood, as the volume of nitrogen is small. 10 c.c. of blood serum, or defibrin-