

CONTENTS

PREFACE	4
RULES OF STUDY AND DIRECTIONS FOR LABORATORY WORK	5
REAGENTS PLACED OUT PERMANENTLY IN THE LABORATORIES	6
GENERAL SAFETY MEASURES - HOW TO PROTECT YOURSELF IN THE LABORATORY ..	7

PART 1

1 SOLUTIONS	10
2 HYDRONIUM ACTIVITY AND PH	11
3 BUFFER SOLUTIONS	15
4 ACID-BASE TITRATIONS	17
5 SELECTED IONIC REACTIONS	21
6 IONS IN DRINKING WATER	27
7 COMPOUNDS CONTAINING HYDROXYL OR CARBONYL GROUP	31
8 CARBOXYLIC ACIDS, AMINES AND AMIDES	35
9 CHROMATOGRAPHY	42
10 SACCHARIDES	47
11 LIPIDS AND STEROIDS	51
12 AMINO ACIDS AND PROTEINS	56
13 SPECTROPHOTOMETRY	61

PART 2

INSTRUCTIONS FOR REDUCING BIOLOGICAL HAZARDS	65
1 BLOOD, PLASMA AND SERUM	66
2 HAEMOGLOBIN	70
3 BILIRUBIN AND UROBILINOIDS	74
4 PROTEINS	80
5 ENZYMES	85
6 GLUCOSE	89
7 LIPIDS AND CHOLESTEROL	94
8 URIC ACID	98
9 AMINO ACIDS AND UREA	101
10 URINE - NORMAL CONSTITUENTS	105
11 URINALYSIS	114
12 GASTRIC SECRETION	122
INDEX	127