PART I
GENERAL CONSIDERATION

SECTION 'A' - Introduction:
  Brief Review of anti-diabetic drugs and aim of present study. 1

SECTION 'B' - Chemical Considerations. 42

PART II
SPECIAL PHARMACOLOGY

SECTION 'A' - i) Effect of Sulphonylurea derivatives on fasting blood sugar level of albino rats. 44

ii) Effect of Sulphonylurea derivatives on alloxan induced diabetes in albino rats. 47

iii) Effect of Sulphonylurea derivatives on glucose tolerance curves in albino rats. 54

iv) Effect of Sulphonylurea derivatives on anterior pituitary induced diabetes in albino rats. 58

v) Effect of Sulphonylurea derivatives on epinephrine induced hyperglycaemia in albino rats. 62

vi) Effect of Sulphonylurea derivatives on pancreatctomised dogs. 66
vii (a) Effect of Sulphonylurea derivatives on glucose uptake by isolated rat hemi-diaphragms. 69

(b) Effect of Sulphonylurea derivatives on glucose transfer in isolated liver slices.

SECTION 'B' - Spectrophotometric estimation of Sulphonylurea derivatives in rat's blood. 73

SECTION 'C' - Acute and chronic toxicity of sulphonylurea derivatives in albino rats. 77

PART III
GENERAL PHARMACOLOGY 83 - 96

SECTION 'A' - Experiments with intact animal preparations.
(a) Methods 83
(b) Results 91

SECTION 'B' - Experiments with isolated tissue preparations.
(a) Methods 86
(b) Results 96

PART IV
Discussion. 97
Summary and conclusions. 115
References.
Appendix.