CONTENTS

Introduction 1

Chapter 1. A general account of the biology of *Hilsa ilisha* (Ham.) and *Hilsa toli* (Cuv. & Val.) 6

2. Studies on the histological changes in the alimentary canal of *H. ilisha* and *H. toli* during different phases of life cycle 11

3. Histological studies of the liver of *Hilsa ilisha* and *Hilsa toli* 61

4. Changes in the lipid content of the liver and gonads of *H. ilisha* during various stages of life cycle 70

5. Distribution of cholinesterase in the liver and stomach of migratory *H. ilisha* and non-migratory *H. toli* 79

6. Histological changes in the pancreas of *H. ilisha* and *H. toli* during different phases of life cycle 93

7. Histological changes in the spleen of *Hilsa ilisha* and *Hilsa toli* during different phases of life cycle 106

8. Histological changes in the kidney of *Hilsa ilisha* and *Hilsa toli* during different phases of life cycle 114

9. Histological studies of the changes in the corpuscles of Stannius of *Hilsa ilisha* and *Hilsa toli* 127
10. Histological studies of the ultimobranchial body of *Hilsa ilisha* and *Hilsa toli* 142
11. Histological studies of secretory cycle of catecholamine secretory cells of heart of *Hilsa ilisha* and *Hilsa toli* 159
Summary 168
Bibliography 174