

Table of Contents

FOREWORD	03
Table of Contents	05
Chapter 1: Prokaryotic Cells	09
I. Structure	10
II. Ultrastructure	11
II. Multiplication	19
V. Quiz	20
V. Answers	25
Chapter 2: Plasma Membrane	29
I. Definition	30
II. Composition	31
III. Function	36
IV. Quiz	42
V. Answers	46
Chapter 3: Cell Cycle–Interphase Nucleus–Chromosomes	47
I. Cell Cycle	48
II. Interphase Nucleus	53
III. Quiz	61
IV. Answers	65
Chapter 4: Endomembrane System	69
I. The endoplasmic reticulum	71
II. The golgi apparatus	74
III. Lysosomes	76

IV. The plant vacuole	78
V. Quiz	79
VI. Answers	83
Chapter 5: Endomembrane System	85
I. Definition	86
II. General Characteristics	86
II. Structure And Ultrastructure of the Mitochondrion	87
IV. Mitochondrial Roles	89
V. Other Functions	90
VI. Origin And Biogenesis	90
VII. Quiz	91
VIII. answers	95
Chapter 6: Chloroplasts	97
I. Definition	98
II. Characteristics	98
III. Ultrastructure and Chemical Composition	98
IV. Physiological Roles	104
V. Quiz	111
VI. Answers	115
Chapter 7: Endosymbiotic Theory	117
I. Introduction	118
II. Quiz	120
III. Answers	124
Chapter 8: The Plant Cell	125
I. The Cell Wall	126
II. Plastids	131
III. Vacuole	131

IV. Quiz	133
V. Answers	137
Annexes	139
References	145