

Contents

Practice 1 Tissue Preparation	1
I. Requirements	1
II. Tissue collection	1
III. Fixation	1
IV. Tissue rinse, dehydration and clearance	4
V. Embedding	6
VI. Sectioning	7
VII. Adherence	8
VIII. Commonly used staining method	9
IX. Mounting and mounting medium	10
X. Artifacts	11
XI. Review question	14
Practice 2 Light Microscope, MOTIC Lab System and Applications	
I. Requirements	15
II. Structures of regular light microscope	15
III. Application of regular light microscope	16
IV. MOTIC lab system and application	19
V. Review question	19
Practice 3 Epithelial Tissue	20
I. Requirements	20

II. LM observation	20
III. Review question	22
Practice 4 Connective Tissue Proper	23
I. Requirements	23
II. Lab observation	23
III. Review questions	24
Practice 5 Cartilage and Bone	25
I. Requirements	25
II. LM observation	25
III. Review question	26
Practice 6 Blood	27
I. Requirements	27
II. The use of the oil-immersion objective	27
III. Lab observation	27
IV. Review questions	28
Practice 7 Muscle Tissue	29
I. Requirements	29
II. Lab observation	29
III. Review questions	30
Practice 8 Nerve Tissue	31
I. Requirements	31
II. Lab observation	31
III. Review questions	33
Practice 9 Circulatory System	34
I. Requirements	34
II. LM observation	34
III. Review question	35

Practice 10 Immune System	36
I. Requirements	36
II. Lab observation	36
III. Extensive questions	37
Practice 11 Endocrine System	38
I. Requirements	38
II. LM observation	38
III. Review question	39
Practice 12 Skin	40
I. Requirements	40
II. Lab observation	40
III. Extensive questions	42
Practice 13 Digestive Tract	43
I. Requirements	43
II. Lab observation	43
III. Extensive questions	46
IV. PBL case	46
Practice 14 Digestive Glands	51
I. Requirements	51
II. Lab observation	51
III. Extensive questions	53
Practice 15 Respiratory System	54
I. Requirements	54
II. Lab observation	54
III. Extensive questions	56
Practice 16 Urinary System	57
I. Requirements	57

II. Lab observation	57
III. Extensive questions	59
IV. PBL case	59
Practice 17 Male Reproductive System	64
I. Requirements	64
II. Lab observation	64
III. Extensive questions	66
Practice 18 Female Reproductive System	67
I. Requirements	67
II. Lab observation	67
III. Extensive questions	69
Practice 19 The Eye and Ear	70
I. Requirements	70
II. Lab observation	70
III. Extensive questions	72
References	73