

Contents

<i>Foreword</i> by Prof MM Mangal	v
<i>Preface to the Third Edition</i>	vii
<i>Preface to the First Edition</i>	ix
<i>Index of Competencies for Histology</i>	xix
<i>Abbreviations</i>	xx

No.	Practical	Page no.	Teacher's signature
1	Light Microscope	1	
2	Epithelium Histology	2	
3	Classification of Epithelium	2	
4	Simple Squamous Epithelium	4	
5	Simple Cuboidal Epithelium	5	
6	Simple Columnar Epithelium	6	
7	Simple Ciliated Columnar Epithelium	7	
8	Simple Columnar Epithelium with Brush/Striated Border	8	
9	Stratified Squamous Epithelium (Non-keratinized)	9	
10	Stratified Squamous Epithelium (Keratinized)	10	
11	Stratified Cuboidal Epithelium	11	
12	Stratified Columnar Epithelium	12	
13	Transitional Epithelium	13	
14	Pseudostratified Ciliated Columnar Epithelium (Trachea)	14	
15	Olfactory Epithelium	15	
16	Ultrastructure of Epithelium	17	
17	Connective Tissue Histology	19	
18	Loose Areolar Tissue	21	
19	Dense Regular Connective Tissue (Tendon LS)	22	
20	Dense Regular Connective Tissue (Tendon TS)	23	
21	Ultrastructure of Connective Tissue	24	
22	Cartilage	26	

No.	Practical	Page no.	Teacher's signature
23	Hyaline Cartilage	27	
24	Elastic Cartilage	28	
25	Fibrocartilage	29	
26	Bone	30	
27	Compact Bone (TS)	31	
28	Compact Bone (LS)	32	
29	Cancellous Bone (Spongy Bone) TS	33	
30	Muscular Tissue	34	
31	Skeletal Muscle (LS)	35	
32	Skeletal Muscle (TS)	36	
33	Cardiac Muscle (LS)	37	
34	Smooth Muscle (LS)	38	
35	Smooth Muscle (TS)	39	
36	Muscle (Ultrastructure)	40	
37	Nervous Tissue	41	
38	Peripheral Nerve (TS)	42	
39	Sensory/Spinal/Dorsal Root Ganglion	43	
40	Autonomic/Sympathetic/Parasympathetic Ganglion	44	
41	Exocrine (Salivary) Glands Histology	45	
42	Sublingual Salivary Gland (Mucous Gland)	47	
43	Parotid Salivary Gland (Serous Gland)	48	
44	Submandibular Salivary Gland (Mixed Gland)	49	
45	Blood Vessels Histology	50	
46	Elastic Artery/Large Artery	51	
47	Muscular Artery/Medium-sized Artery	52	
48	Lymphoid Tissue	53	
49	Lymph Node	53	
50	Spleen	55	
51	Thymus	57	

No.	Practical	Page no.	Teacher's signature
52	Palatine Tonsil	59	
53	Integumentary System	61	
54	Thin Skin	62	
55	Thick Skin	63	
56	Respiratory System	64	
57	Trachea	65	
58	Lung	66	
59	Interalveolar Septum	68	
60	Epiglottis	69	
61	Gastrointestinal System	71	
62	Tongue	72	
63	Oesophagus	74	
64	TS through Lower One-third of Oesophagus	75	
65	TS through Upper One-third of Oesophagus	76	
66	TS through Middle One-third of Oesophagus	77	
67	Cardioesophageal Junction	78	
68	Stomach	80	
69	Fundus/Body of Stomach (TS)	81	
70	TS through Pylorus of Stomach	82	
71	Intestines	84	
72	Duodenum	85	
73	Jejunum	86	
74	Ileum	87	
75	Large Intestine	88	
76	Vermiform Appendix	88	
77	TS through Vermiform Appendix	89	
78	Colon	90	
79	Hepatobiliary System	91	
80	Liver	91	

No.	Practical	Page no.	Teacher's signature
81	Pancreas	93	
82	Gall Bladder	95	
83	Urinary System	97	
84	Kidney	99	
85	Ureter	100	
86	Urinary Bladder	102	
87	Reproductive System	104	
88	Male Reproductive System	104	
89	Testis	105	
90	Epididymis	106	
91	Vas Deferens/Ductus Deferens	108	
92	Vas Deferens	109	
93	Prostate	110	
94	Penis	112	
95	Female Reproductive System	114	
96	Ovary	115	
97	Uterus	116	
98	Uterus (Proliferative Phase)	117	
99	Uterus (Secretory Phase)	118	
100	Cervix	119	
101	Fallopian Tube/Uterine Tube	121	
102	Placenta	123	
103	Umbilical Cord	125	
104	Corpus Luteum	126	
105	Breast	128	
106	Mammary Gland (Resting)	129	
107	Mammary Gland of Pregnancy	130	
108	Mammary Gland of Lactation	131	

No.	Practical	Page no.	Teacher's signature
109	Endocrine Glands	132	
110	Pituitary Gland	132	
111	Thyroid Gland	134	
112	Parathyroid Gland	135	
113	Pineal Gland	136	
114	Suprarenal Gland	137	
115	Central Nervous System	139	
116	Spinal Cord	139	
117	Cerebrum	140	
118	Cerebellum	141	
119	Special Senses	142	
120	Cornea	142	
121	Sclero-corneal Junction	144	
122	Retina	146	
123	Optic Nerve	148	
124	Eyelid	149	
125	Lip	151	
126	Cochlea and Organ of Corti	152	

SUGGESTED ASSESSMENT CRITERIA

- Complete file with good and accurate diagrams 5 marks
- Complete file but a few (less than 10%) incorrect diagrams 4 marks
- Complete file but mostly (more than 50%) incorrect diagrams 3 marks
- Incomplete file (more than 75% complete) 2 marks
- Incomplete file (less than 75% complete) 1 mark
- No diagrams drawn (less than 25% diagrams drawn) Zero

INDEX OF COMPETENCIES FOR HISTOLOGY

Code	Competency	Page no
AN9.2	Breast: Describe the location, extent, deep relations, structure, blood supply, lymphatic drainage, microanatomy and applied anatomy of breast	128
AN25.1	Identify, draw and label a slide of trachea and lung	64
AN43.2	Identify, describe and draw the microanatomy of pituitary gland, thyroid, parathyroid gland, tongue, salivary glands, tonsil, epiglottis, cornea, retina	71, 132, 142
AN43.3	Identify, describe and draw microanatomy of olfactory epithelium, eyelid, lip, sclera-corneal junction, optic nerve, cochlea-organ of Corti, pineal gland	15, 136, 142, 148
AN52.1	Describe and identify the microanatomical features of gastrointestinal system: Oesophagus, fundus of stomach, pylorus of stomach, duodenum, jejunum, ileum, large intestine, appendix, liver, gall bladder, pancreas and suprarenal gland	71, 137
AN52.2	Describe and identify the microanatomical features of: Urinary system: Kidney, ureter and urinary bladder Male reproductive system: Testis, epididymis, vas deferens, prostate and penis Female reproductive system: Ovary, uterus, uterine tube, cervix, placenta and umbilical cord	97, 104
AN52.3	Describe and identify the microanatomical features of cardioesophageal junction, corpus luteum	78, 126
AN64.1	Describe and identify the microanatomical features of spinal cord, cerebellum and cerebrum	139
AN65.1	Identify epithelium under the microscope and describe the various types that correlate to its function	2
AN65.2	Describe the ultrastructure of epithelium	17
AN66.1	Describe and identify various types of connective tissue with functional correlation	19
AN66.2	Describe the ultrastructure of connective tissue	24
AN67.1	Describe and identify various types of muscle under the microscope	34
AN67.2	Classify muscle and describe the structure–function correlation of the same	40
AN67.3	Describe the ultrastructure of muscular tissue	40
AN68.1	Describe and identify multipolar and unipolar neuron, ganglia, peripheral nerve under the microscope	41
AN68.2	Describe the structure–function correlation of neuron	41
AN68.3	Describe the ultrastructure of nervous tissue	41
AN69.1	Identify elastic and muscular blood vessels, capillaries under the microscope	50
AN69.2	Describe the various types and structure–function correlation of blood vessels	50
AN69.3	Describe the ultrastructure of blood vessels	50
AN70.1	Identify exocrine gland under the microscope and distinguish between serous, mucous and mixed acini	45
AN70.2	Identify the lymphoid tissue under the microscope and describe microanatomy of lymph node, spleen, thymus, tonsil and correlate the structure with function	53
AN71.1	Identify bone under the microscope; classify various types and describe structure–function correlation of the same	30
AN71.2	Identify cartilage under the microscope and describe various types and structure–function correlation of the same	26
AN72.1	Identify the skin and its appendages under the microscope and correlate the structure with function	61

Note: Competency codes are as provided in the new curriculum.