

## INDEX

The following is a list of suggested answers to the Self-Test in Laboratory #11. There are other tissues on these slides as well.

### Question & Slide #

1. [SL 64](#) Simple squamous epithelium  
Cardiac muscle
2. [SL 71](#) Stratified squamous epithelium (non-keratinized)  
Smooth muscle  
(epithelium on other surface is variable)
3. [SL 85](#) Simple squamous epithelium  
Dense irregular c.t. (outside of smooth muscle that encircles vessels)  
Also loose irregular c.t. on slide and some adipose tissue
4. [SL 27](#) Dense regular c.t.  
Skeletal muscle
5. [SL 47](#) Large tube with thick layer of smooth muscle is lined with pseudostratified columnar epithelium with stereocilia  
Smaller tubes (blood vessels) are lined with simple squamous epithelium (endothelium)  
Other tissues: skeletal muscle, loose and dense irregular C.T., peripheral nerve bundles.
6. [SL 90](#) Stratified squamous epithelium (keratinized, bottom layer of tissue on virtual slide)  
Dense irregular c.t.  
Skeletal muscle  
Mucous and serous glands (acini)  
Loose irregular c.t.  
Stratified squamous epithelium (non-keratinized, top layer of tissue on virtual slide)
7. [SL 9](#) Stratified squamous epithelium (keratinized)  
Dense irregular c.t. (rather variable dense to almost loose)  
Elastic cartilage  
Adipose tissue (fat cells). These also occur on other side of cartilage.  
Dense irregular c.t. (similar to above)  
Stratified squamous epithelium (keratinized)
8. [SL 110](#) As in Slide 9, this organ is symmetrical  
Pseudostratified columnar epithelium, ciliated with goblet cells (these are difficult to find) lines upper and lower surfaces  
Loose to dense irregular c.t.  
Cancellous bone  
Glands occur in c.t. that appear mostly serous  
Vessels lined with simple squamous epithelium surrounded by smooth muscle
9. [SL 183](#) Mostly mucous glands (acini) and skeletal muscle, bundles of smooth muscle and dense irregular c.t. may be observed.
10. [SL 14](#) Mostly between two layers of smooth muscle.

11. [SL 56](#) Mostly small bundles (fascicles) of peripheral nerve - some small ganglia.
12. [SL 96](#) Stratified squamous (non-keratinized) epithelium  
Loose irregular c.t. containing many elastic fibers  
Band of elastic fibers separates this region from skeletal muscle below.  
Adipose tissue below skeletal muscle
13. [SL 62](#) Epithelium mostly pseudostratified columnar ciliated with goblet cells - small regions of stratified squamous epithelium (non-keratinized)  
Loose irregular c.t. containing serous and mucous glands  
Skeletal muscle  
Elastic cartilage may be present on some slides  
Hyaline cartilage  
Some slides may contain regions of bone  
Some slides may contain regions of cuboidal epithelium arranged in circles (thyroid follicle cells); other regions of this epithelium appear to be simple squamous  
Other tissues include: adipose tissue, nerves and the components of blood vessels

## **HISTOLOGY SLIDES** **SLIDE NUMBER INDEX**

1. Connective Tissue Spread
2. Pancreas, Azure B, Basic Fuchsin
3. Rat epididymis, Golgi apparatus (silver)
4. Rat intestine, mitochondria (Iron hematoxylin)
5. Rat kidney, mitochondria (Altman stain)
6. Body of stomach (PAS)
7. Liver stained for glycogen (rat)
8. Brown fat (hamster)
9. Auricle of ear (infant)
10. Body of stomach (H & E)
11. Ileum Peyer's patches (infant)
12. Nerve and skeletal muscle (brachial plexus)
13. Ovary, uterine tube, & broad ligament (baby)
14. Jejunum (H & E)
15. Trachea, esophagus & lymph node (child)
16. Esophagus - lower
17. Epiglottis
18. Ureter
19. Jejunum (PAS)
20. Primary bronchus proximal
21. Blood smear (adult)
22. Blood smear with reticulocytes (cord blood)
23. Esophagus - upper to middle
24. Primary bronchus, hilar node lung (child)
25. Skin - foot (H & E)
26. Skin (Bencosme's trichrome)
27. Ligament (long-section and skeletal muscle (monkey)
28. Femoral artery and nerve (monkey)
29. White fish mitosis
30. Aorta, pulmonary artery, and valves (orecin stain)
31. Aorta, esophagus, & lymph node
32. Reticular fibers (spleen)
33. Apocrine sweat glands (axilla)
34. Thymus, Adult
35. Umbilical cord, 5 months: pregnancy
36. Larynx (infant)
37. Meniscus of knee
38. Bone - dried, ground
39. Cancellous bone (sternum)
40. Cross section of bone
41. Bone - young cross-section
42. Snout (fetal pig)
43. Developing bones - foot (pig fetus)
44. Nerve - osmic acid stain,
45. Spinal cord, silver technique (even desks only)
46. Nerve, long-section
47. Ductus deferens and spermatic cord
48. Esophagus - stomach
49. Semilunar ganglion
50. Spinal ganglion & peripheral nerve
51. Ganglion from sympathetic trunk
52. Adrenal gland, ganglion, large vein
53. Colon
54. Pancreas, lymph nodes, duodenum, & hepatopancreatic ampulla
55. Testis, ductus epididymis, & proximal ductus deferens
56. Prostate and seminal vesicle
57. Bladder
58. Menstruating uterus (early)
59. Lung near hilus
60. Neuromuscular spindle
61. Skeletal muscle
62. Larynx (monkey)
63. Atrium, ventricle, atrioventricular valve, & pulmonary vein Gomori's Tr.
64. Heart, base of pulmonary valve, left A.V. valve (Bencosme's trichrome foot stain)
65. Lymph node with inflammation
66. Spleen
67. Liver - trypan blue (rat)
68. Bone marrow smear
69. Liver, gall bladder (premature baby)
70. Tongue (tip)
71. Vagina & bladder
72. Base of tongue with circumvallate papilla on some
73. Pylorus - duodenum (monkey)
74. "Normal" tonsil & anterior pharynx (dog)
75. Tonsil
76. Adenoid
77. Lymph node

**HISTOLOGY SLIDES**  
**SLIDE NUMBER INDEX, CONTINUED**

78.	Lymph Node	121.	Hypophysis (Mallory's stain)
79.	Spleen-cross-section through hilus	122.	Hypophysis PAS, Orange G'
80.	Thymus (child)	123.	Hypophysis
81.	Thymus (premature infant)	124.	Thyroid gland
82.	Thymus (young adult)	125.	Inflammation, axillary skin
83.	Colon	126.	Parathyroid
84.	Lung with tubercular abscess	127.	Adrenal gland (child)
85.	Popliteal artery & vein, 4 year old child (leukemia)	128.	Pineal glands (adult & child)
86.	Skeletal muscle, thin section (monkey)	129.	Ovary with newly-forming corpus luteum
87.	Large Vein (portal)	130.	Ovary with well-developed corpus luteum
88.	Right ventricle, pulmonary valve & pulmonary artery	131.	Ovary of pregnancy
89.	Scalp	132.	Ovary - senile
90.	Lip	133.	Uterine tube - fimbria and ampulla
91.	Parotid gland	134.	Uterine tube - ampulla
92.	Submandibular gland (infant)	135.	Uterine tube, ampulla (5 months pregnancy)
93.	Major sublingual gland	136.	Ovary - cat follicles
94.	Teeth (fetal calf, pig, or monkey) Even desks only	137.	Ovary - monkey atresia
95.	Argentaffin cells. Even desks only.	138.	Uterus, early proliferative
96.	Pharynx, lower portion	139.	Uterus, late proliferative
97.	Stomach; body - pylorus transition	140.	Uterus, early secretory
98.	Duodenum, plasma cells & eosinophils	141.	Uterus, secretory stage
99.	Appendix	142.	Cervix of uterus
100.	Secretory endometrium	143.	Kidney Cortex - 1 um Plastic - Toluidine Blue
101.	Mucosa, (cervix of uterus)	144.	Vagina
102.	Liver	145.	Placenta, 5 months pregnancy
103.	Liver	146.	Placenta at term
104.	Liver with obstructive jaundice	147.	Pregnant uterus
105.	Gall bladder & liver (dog)	148.	Umbilical cord at term
106.	Gall bladder	149.	Mammary gland - inactive (child)
107.	Common bile duct (dog) or cystic and hepatic duct (monkey)	150.	Inactive, adult mammary gland
108.	Pancreas; medium sized artery; large vein on some	151.	Active mammary gland - 7 months pregnancy
109.	Pancreas for A & B cells	152.	Active mammary gland - late pregnancy
110.	Nasal respiratory mucosa & concha	153.	Mammary gland - lactating
111.	Trachea	154.	Post-partum mammary gland (regressing)
112.	Lung (child)	155.	Nipple human breast
113.	Lung (deep portion)	156.	Testis & epididymis
114.	Lung (premature body)	157.	Testis (atrophic)
115.	Kidney with calyx	158.	Testis, ductus epididymis
116.	Kidney - cortex & medulla	159.	Ductus deferens & spermatic cord (Bencosme's trichrome stain)
117.	Kidney - cross-section through cortex	160.	Human chromosomes. Even desks
118.	Esophageal-Stomach Trans.-Mast Cell	161.	Seminal vesicle
119.	Urethra (female) lower portion	162.	Prostate gland & prostatic urethra
120.	Female urethra - upper portion		

**HISTOLOGY SLIDES**  
**SLIDE NUMBER INDEX, CONTINUED**

- 163. Prostate (child)
- 164. Membranous urethra & bulbourethral  
glands on some
- 165. Penis (child)
- 166.
- 167.
- 168. Spinal cord, cervical (Weigert's stain)
- 169.
- 170.
- 171.
- 172.
- 173.
- 174.
- 175. Lacrimal gland
- 176. Eyelid, infant
- 177. Blood smear - Chronic Myelogenous Leukemia
- 178. Skin - finger tip
- 179. Bladder
- 180. Spleen with macrophages  
(typhoid fever)
- 181. Spinal cord, (cresyl-violet stain)
- 182. Rectum - anal canal - cutaneous junction (baby)
- 183. Bulbourethral gland
- 184. Elastic tissue stain (Resorcin-Basic Fuchsin),  
Lung (Child), Aorta (Child, leukemia),  
Epiglottis (Child)

## SUBJECT INDEX WITH SLIDE NUMBERS

### Cardiovascular System

- 30. Aorta (orcein)
- 31. Aorta
- 52. Inferior Vena Cava
- 63. Heart (atrium & ventricle)
- 64. Interventricular septum
- 65. Lymphatics
- 66. Sinusoids, spleen
- 67. Sinusoids, spleen
- 85. Popliteal artery & vein
- 87. Large vein (portal)
- 88. Heart (right ventricle & pulmonary artery)
- 184. Aorta, inferior vena cava

### Cell

- 1. Amnion (pig embryo)
- 2. Pancreas, RNA & RNA  
Azure B - Basic Fuchsin
- 3. Rat epididymis, Golgi apparatus (silver)
- 4. Rat intestine, mitochondria (iron hematoxylin)
- 5. Rat kidney, mitochondria (Altman technique)
- 7. Liver stained for glycogen (rat)
- 8. Brown fat (hamster)
- 29. Mitosis (White fish)
- 143. Lysosomes in Kidney Cortex  
1  $\mu$ m section (Toluidine Blue)

### Connective Tissue

- 1. Connective Tissue Spread
- 12. Developing adipose
- 17. Elastic cartilage
- 20. Hyaline cartilage
- 27. Ligament & skeletal muscle (monkey)
- 32. Reticular fibers (spleen)
- 34. Adipose
- 35. Mucous C.T.
- 37. Meniscus of knee (fibrous cartilage)
- 38. Bone - dried ground
- 39. Cancellous bone (sternum)
- 40. Bone - cross-section
- 41. Bone (young, cross section)
- 42. Snout (fetal pig)

- 43. Developing bones (pig fetus)
- 118. Mast Cells
- 184. Elastic tissue stain

### Digestive System

- 2. Pancreas
- 6. Stomach, body (PAS)
- 10. Stomach, body (H & E)
- 11. Ileum (Peyer's patches)
- 14. Jejunum (H & E)
- 15. Esophagus (middle)
- 16. Esophagus (lower)
- 19. Jejunum (PAS)
- 23. Esophagus (upper to middle)
- 42. Fetal tooth
- 48. Esophagus - stomach transition Cell
- 53. Colon
- 54. Hepatopancreatic ampulla and pancreas
- 67. Liver, trypan blue (rat)
- 69. Liver & gall bladder (premature baby)
- 70. Tongue (tip)
- 72. Tongue (base)
- 73. Pylorus - duodenum (monkey)
- 90. Lip
- 91. Parotid gland
- 92. Submandibular gland
- 93. Sublingual gland
- 94. Tooth (developing) Even desks only
- 95. Enteroendocrine (Argentaffin) cells. Even desks only
- 96. Pharynx
- 97. Stomach body - pylorus transition
- 99. Appendix
- 102. Liver
- 103. Liver
- 104. Liver, obstructive jaundice
- 105. Gall bladder, liver (dog)
- 106. Gall bladder
- 107. Bile duct
- 108. Pancreas
- 109. Pancreas, A & B cells
- 118. Esophageal - Stomach Transition - Mast Cell Stain
- 182. Rectum - anal canal - cutaneous junction

## SUBJECT INDEX WITH SLIDE NUMBERS, CONTINUED

### Endocrine System

- 52. Adrenal gland
- 109. Pancreas alpha A, Beta cells
- 121. Hypophysis (Mallory's stain)
- 122. Hypophysis (PAS-Orange G)
- 123. Hypophysis (H & E)
- 124. Thyroid
- 126. Parathyroid
- 127. Adrenal
- 128. Pineal gland

### Excretory System

- 5. Kidney, mitochondria (rat)
- 18. Ureter
- 57. Bladder
- 115. Kidney, calyx
- 116. Kidney, cortex & medulla
- 117. Kidney, cross-section cortex
- 118. Kidney, 7 months fetus
- 119. Urethra, female (lower)
- 120. Urethra, female (upper)
- 179. Bladder

### Female Reproductive System

- 13. Ovary, uterine tube (baby)
- 35. Umbilical cord
- 58. Uterus (menstruating)
- 71. Vagina & bladder
- 100. Secretory endometrium
- 101. Mucosa, cervix of uterus
- 119. Urethra & vagina
- 120. Urethra & vagina
- 129. Ovary (with newly forming corpus luteum)
- 130. Ovary (with well developed corpus luteum)
- 131. Ovary of pregnancy
- 132. Ovary, senile
- 133. Uterine tube
- 134. Uterine tube
- 135. Uterine tube, pregnancy
- 136. Ovary - cat follicles
- 137. Ovary - monkey atresia
- 138. Uterus (early proliferative)
- 139. Uterus (late proliferative)
- 140. Uterus (early secretory)
- 141. Uterus (secretory)
- 142. Uterus - cervix

- 144. Vagina
- 145. Placenta (5 months)
- 146. Placenta (term)
- 147. Uterus (pregnant, decidua parietalis)
- 148. Umbilical cord (term)
- 149. Mammary gland (child)
- 150. Mammary gland (inactive)
- 151. Mammary gland (7 months pregnancy)
- 152. Mammary gland (late pregnancy)
- 153. Mammary gland (lactating)
- 154. Mammary gland (regressing)
- 155. Nipple (Human, breast)

### Hemopoietic Tissue

- 21. Blood smear
- 22. Blood smear (reticulocytes)
- 24. Primary bronchus, lymph node, lung (child)
- 32. Reticular fibers
- 34. Thymus (36 year old female)
- 39. Sternum
- 41. Bone marrow section
- 65. Lymph node, inflammation
- 66. Spleen
- 68. Bone marrow smear
- 69. Liver (premature baby)
- 74. "Normal" tonsil & pharynx
- 75. Tonsil
- 76. Adenoid
- 77. Lymph nodes
- 78. Lymph node
- 79. Spleen
- 80. Thymus (child)
- 81. Premature infant
- 82. Thymus (young adult)
- 83. Fixed macrophages
- 84. Lung with tubercular abscess
  
- 98. Plasma cells, eosinophils in duodenum
- 125. Inflammation, axillary skin
- 180. Spleen (typhoid fever)

## SUBJECT INDEX WITH SLIDE NUMBERS, CONTINUED

### Integument

- 9. Auricle of ear
- 25. Skin (sole of foot)
- 26. Skin (Bencosme's stain)
- 33. Skin (axilla)
- 42. Skin (embryonic)
- 89. Scalp
- 125. Skin (axilla, inflammation)
- 176. Eyelid (infant)
- 178. Skin (finger tip)

### Male Reproductive System

- 17. Epiglottis
- 47. Ductus deferens, spermatic cord
- 55. Testis, Epididymis, ductus deferens
- 156. Testis, epididymis
- 157. Testis, atrophic
- 158. Testis, epididymis, ductus deferens, child
- 159. Ductus deferens, spermatic cord
- 161. Seminal vesicle
- 162. Prostate gland
- 163. Prostate (child)
- 164. Membranous urethra
- 165. Penis (child)
- 183. Bulbourethral gland
- 56. Prostate and seminal vesicle

### Muscle

- 23. Smooth and skeletal (esophagus)
- 53. Smooth (colon)
- 57. Smooth muscle (bladder)
- 60. Neuromuscular spindle
- 61. Skeletal muscle
- 63. Cardiac muscle (heart)
- 64. Cardiac muscle (heart)
- 86. Skeletal muscle
- 88. Cardiac muscle (heart)
- 138. Smooth muscle (uterus)

### Nervous Tissue

- 12. Nerve, skeletal muscle
- 44. Nerve osmic acid
- 45. Spinal cord (lumbar, silver) even desks only
- 46. Nerve, longitudinal section

- 49. Semilunar ganglion
- 50. Spinal ganglion & peripheral nerve
- 52. Adrenal gland, ganglion, large vein
- 168. Spinal cord, cervical, (Weigert's stain)
- 181. Spinal cord (Cresyl violet)

### Respiratory System

- 15. Trachea
- 20. Bronchus (large)
- 24. Primary bronchus
- 36. Larynx and 36A Odd desks only
- 59. Lung (near hilus)
- 110. Respiratory mucosa, concha
- 111. Trachea
- 112. Lung (child)
- 113. Lung (deep)
- 114. Lung (premature)
- 175. Lacrimal gland
- 184. Lung & epiglottis (elastic tissue stain)