

## I-6 MD - FINAL EXAM HISTOLOGY - USEFUL INFORMATION

Practical exam will cover the whole material.

Theoretical exam will cover histology of systems and organs.

### LIST OF MICROSCOPE SLIDES **NOT REQUIRED** DURING THE LAB EXAM

1. All slides shown during labs “Cell 1” and “Cell 2”.
2. All slides shown during lab “Epithelial tissue” (different types of epithelia have to be identified in slides of organs)
3. Mesenchyme
4. Bone marrow smear
5. All slides of tooth and its development
6. Umbilical cord

### LIST OF STRUCTURES **TO BE IDENTIFIED** IN ELECTRON MICROGRAPHS DURING THE LAB EXAM

**The electron micrographs presented during the lab exam will be slightly different from those shown at the labs. All the micrographs listed below can be found in the folders used during the labs and in the textbook.**

1. Cell - structural components of cell nucleus, nuclear pores, all organelles
2. Epithelial tissue: brush border, cilia, basal lamina, intercellular junctions
3. Connective tissue: collagen fibrils, plasma cell, macrophage, mast cell
4. Bone: osteocyte, osteoclast, ruffled border
5. Blood: neutrophil, eosinophil, monocyte, lymphocyte, blood platelet
6. Muscular tissue: components of the sarcomere (bands and lines), T-tubule, muscular triad, intercalated disc in cardiac muscle
7. Nervous tissue: unmyelinated and myelinated nerve fibres in cross-section, synapse
8. Circulatory system: capillary vessel (continuous or fenestrated) in cross-section
9. Respiratory system: air-blood barrier, pneumocyte type II
10. Urinary system: filtration barrier, proximal & distal tubule cell
11. Digestive system: taste bud, parietal cell, intestinal absorptive cell, goblet cell, sinusoidal and canalicular domains of hepatocyte, pancreatic exocrine cell
12. Endocrine system: steroid-producing cell, beta cell of the pancreatic islet, DNES (enteroendocrine) cell in epithelium
13. Male reproductive system: Leydig cell with Reinke crystals, spermatozoon tail in cross-section
14. Female reproductive system: primary ovarian follicle with oocyte, zona pellucida and follicular cells, placental barrier
15. Eye: photoreceptors (outer/inner segments), lens fibers