

## **Topic list for Histology I. exam**

(2006/07)

1. The light microscope
2. Special microscopes
3. Preparation of tissues for light microscopy
4. Immunocytochemistry
5. The electron microscope
6. Preparation of tissues for electron microscopy
7. Epithelial tissues: definition and classification
8. The epithelial cell: the polarity of the epithelial cell
9. Surface epithelia: simple and pseudostratified epithelia
10. Surface epithelia: stratified epithelia
11. Secretory epithelia: classification of glands
12. Secretory epithelia: modes of secretion
13. Secretory epithelia: serous, mucous and seromucous acini
14. Connective tissues: definition and classification
15. Connective tissues: extracellular matrix (ground substance and fibers)
16. Connective tissues: cell types of the connective tissues
17. Embryonic connective and supportive tissue types
18. Adult connective tissue types
19. The blood as a connective tissue: plasma and cellular components
20. Blood: erythrocytes and platelets (morphology and function)
21. Blood: granulocytes and agranulocytes (morphology and function)
22. Blood: comparison of the mammalian and avian blood corpuscles
23. Prenatal and postnatal hematopoiesis, structure of the bone marrow, hematopoietic stem cells
24. Hematopoiesis: erythrocyte cell line
25. Hematopoiesis: granulocyte cell line
26. Hematopoiesis: lymphopoiesis and thrombopoiesis
27. Supportive tissues: cartilage
28. Supportive tissues: bone
29. Osteogenesis: desmal ossification
30. Osteogenesis: chondral ossification
31. Muscular tissues: definition and classification

32. Muscular tissues: skeletal muscle
33. Muscular tissues: cardiac muscle
34. Muscular tissues: smooth muscle
35. Muscular tissues: molecular basis of muscle contraction
36. Nervous tissue: definition and its elements
37. Nervous tissue: the neurone
38. Nervous tissue: glial cells, types and functions
39. Nervous tissue: synapses
40. Nervous tissue: structure of a nerve, types of nerve fibers