

BMD 415, Lab Exam 1, Sept. 24, 2002

Instructions

Do not move slides or change objectives unless given specific permission to do so. Raise your hand if you think the slide has been moved.

You may adjust oculars and fine focus only.

There are 25 stations with two questions per station.

At the beginning of the exam pick up an answer sheet and go to any station. Write your name on the answer sheet and mark the number of the station you will begin with. You may answer the first question.

You will have 1 minute per station. Do not change stations until the signal is given.

At the end of the exam, there will be about 25 minutes to return to any station you want.

Do not discuss the exam with anyone in the other lab section until everyone has completed the exam.

The answer key will be posted in the hallway and at the class website after the exam.

You MAY move the slide and change the objective lens.

1. Identify the tissue. 28, cardiac muscle
 2. Are there numerous nerves in this specimen? NO

 3. Identify the epithelium. 49 sml intestine, simple columnar
 4. Identify the "island" of tissue. villus

 5. Identify the structure. 18 spinal cord rat, DRG
 6. Identify the space to the left of the structure. subarachnoid space

 7. Identify the area at the pointer. 9 endochondral bone form, zone of hypertrophy
 8. Name the next stage in the process (after the pointer). zone of calcified cartilage

 9. Identify the epithelium. 71 ureter, transitional epith.
 10. Describe any special property of this epithelium. can stretch, tight jxns

 11. Identify the nucleus above the pointer. 28 cardiac, xs, cardiac muscle nucleus
 12. Identify the nucleus below the pointer. fibroblast

 13. Identify the cell. 15 cerebellum, Purkinje cell
 14. Identify the layer below the cell. granular layer

 15. Identify the cavity. 6 ground bone, Volkmann's / Haversian
 16. What is located in the cavity in the living tissue? bl vs, nerves

 17. Identify the epithelium. 60 trachea, PSCC
 18. Identify the structures at the pointer. cilia

 19. Identify the tissue. 48 sm intes, smooth muscle xs
 20. Give one reason for your identification. centr nucl / varying diameters / location

 21. Identify the knobby structures. 14 Golgi stain, dendritic spines
 22. What is the function of the knobs? postsynaptic sites
- You MAY move the slide and change the objective lens.
23. Identify the type of cartilage on this slide. 4 ext ear, elastic cart
 24. Identify the organ. ext ear

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25. Identify the main tissue. 83, umbilicus, Wharton's jelly, mucous CT

26. Name the predominant cell type in this tissue. mesenchymal cells

27. Identify the membrane above the pointer. 95 optic papilla, arachnoid

28. Identify the membrane below the pointer. pia

29. Identify the structure at the pointer. 40 tongue, node

30. Would this structure be visible in an osmium-fixed, plastic section of the same specimen? yes

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31. Identify the organ. 27 aorta

32. Identify the stain. orcein

33. What intercellular junction is numerous in the area at the pointer? 66 thick skin, desmosomes

34. Identify the epithelium. strat squam keratinized

35. Identify the light-staining band. 23/96 plastic, eye, I band

36. Why are the striations so clear? 1 micrometer thick section

37. Identify the structure at the pointer. 16 cerebellum, choroid plexus

38. Describe the function of the structure. secretes CSF

39. Identify the cells to the right of the pointer. 7/8 bone, osteoprogenitor cell

40. Identify the cells to the left of the pointer. osteoblast

41. Identify the organ to the right of the pointer. 45 cardioesophageal jxn, esophagus

42. Identify the organ to the left of the pointer. stomach

43. Identify the basophilic cell. 45 cardioesophageal jxn, myenteric plexus

44. Describe the cell's function. postganglionic parasympathetic neuron

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45. Identify the organ. 11 cerebral cortex

46. Label the diagram on the answer sheet with arrows to indicate the superficial surface.

47. Identify the tissue. 1 tendon, dense regular CT

48. Is this tissue excitable / contractile / neither? neither

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49. Do these exocrine glands have the same shape as glands in the stomach? 58 pancreas

50. Identify the epithelium of the ducts. simple cuboidal/columnar