Anatomy Study Guide Lecture Exam 1

1. What are the 4 primary tissues?
2. Be able to describe the planes and sections of the body.
3. What is the mediastinum? Which organs are included in the mediastinum?
4. What organs are located in the dorsal body cavity?
5. Give in order of complexity, the levels of structural organization.
6. Name 2 organs that belong to 2 different organ systems.
7. Know and understand the directional terms discussed in class.
8. Be able to give scientific names for the common names of body parts. (eg. inside of elbow = antecubital).
9. Know the general functions of the organelles.
10. Describe the molecular components of the plasma membrane. What are their functions in the membrane? Which lipids have a hydrophilic head and two hydrophobic tails? Which molecules can easily pass through the membrane and which need help?
11. How many chromosomes do human cells have? How many homologous pairs of chromosomes to human cells have?
12. What are the functions of the following cell junctions? tight junctions desmosomes gap junctions
13. Be able to describe passive and active forms of transport.
14. How are the following forms of membrane transport different from one another? diffusion, osmosis, facilitated diffusion, pinocytosis, phagocytosis, receptor mediated endocytosis, exocytosis.
15. Besides protection, be able to list a major function of each type of epithelium.
16. Be able to give a specific location in the body for each type of epithelium.
17. How are endocrine and exocrine glands different?
18. Scientifically, what are the free and attached edges of covering and lining epithelium are called?
19. What are the functions of the skin?
20. Given the following layers of the skin, be able to give a description of each. Stratum lucidum, stratum basale, stratum corneum, stratum spinosum, stratum granulosum
21. What are the pigments responsible for skin color?
22. What are the pigments responsible for hair color?
23. Name a function and location for each of the specific connective tissues.
24. Name the major tissue types found in each layer of the skin? (epidermis, dermis, sub-Q)
25. What are Pacinian corpuscles, Merkel cells, and Meissner’s corpuscles and what are they specifically sensitive to?
26. What is the arrector pili muscle? Where is it found? What type of muscle does it consist of? What structure is it usually associated with? Give reasons why this muscle might contract.
27. Describe the anatomy of a hair and its follicle. Name the layers of a hair as well as the layers of the follicle and be able to tell where they are.
28. What are the epoynchium, hyponycium and the lunula? Which layer of the skin do nails grow from?
29. Which nails grow fastest? What time of the year do nails grow the fastest?
30. Where are and what is the secretion for each of the following: ceruminous glands, sudoriferous glands, sebaceous glands? Are these glands endocrine or exocrine glands?
31. Name the cell types of the epidermis and their functions. Which cells are the most abundant in the skin?
32. Which primary tissue type is the most abundant?
33. Which cartilage is strongest; most abundant?
34. What is the function of keratin cells in the skin?
35. Why are lines of cleavage in the skin clinically important?
36. What are the functions of bone tissue?
37. Given the following cartilage terms, be able to describe/give examples of each: lacunae, matrix, fibers, perichondrium, chondrocyte, matrix, ground substance.
38. Given the following bone terms, be able to describe each.
39. Where are the following parts of a long bone found?
40. Define and describe how endochondrial and intramembranous ossification are different? Which bones develop via these two methods?
41. Describe the following bone fractures.
42. What is the definition of the cranial bones? Which bones are cranial bones? Which cranial bone is considered the keystone of the cranial floor and why?
43. What is the definition of the facial bones? Which bones are considered facial bones? Which facial bone articulates with the most other facial bones?
44. What is a paranasal sinus? Name the bones that have paranasal sinuses.
45. What is the difference between the following?
46. Name all the bones of the orbit. Which facial bones are included in the bones of the orbit? Which cranial bones are included in the bones of the orbit?
47. Describe how can you distinguish cervical, thoracic and lumbar vertebrae from one another?
48. Name the bones of the pectoral and pelvic girdles.
49. Name the bones of the upper and lower limbs.
50. Be able to list the carpals and tarsals.