Lecture Exam 3 is on 11/2/09 and covers chapters 8 – Nervous System, 9 – Special and General Senses, 10 – Endocrine System, and Chapter 11 – Blood and Blood Pressure. This exam is a lecture assignment. It is due on day of exam.

Multiple Choice Questions

1. # of ventricles in brain is A) 1  B) 2  C) 3  D) 4
2. It lies deep to cerebral cortex and covers deeper nuclei A) white matter  B) gray matter  C) ganglia  D) nerves
3. Superior and inferior colliculi, cerebral peduncles and aqueduct are part of -----brain A) fore  B) mid  C) hind  D) none
4. It controls body balance and posture correction A) cerebrum  B) hypothalamus  C) medulla  D) cerebellum
5. A ring like part of eye has muscles that control thickness of lens A) iris  B) ciliary body  C) choroid  D) retina
6. Name the new taste detected by Japanese scientists A) sour  B) bitter  C) umami  D) hot
7. Pick the correct sequence of neurons in retina, light passes through them A) ganglion – bipolar – rods/cones  B) rods/cones – bipolar – ganglion  C) bipolar – cones/rods - ganglion  D) ganglion – cone/rods - bipolar
8. Short term stress management hormone is A) cortisol  B) thyroxine  C) Insulin  D) epinephrine
9. When a person can see clearly only close objects A) glaucoma  B) cataract  C) myopia  D) hyperopia
10. Insulin A) lowers blood glucose  B) promotes protein synthesis  C) favors greater bone growth  D) all
11. It is not a tropic hormone secreted by anterior pituitary gland A) ACTH  B) FSH  C) Prolactin  D) TSH
12. Hypersecretion of Growth hormone before puberty causes A) gigantism  B) dwarfism  C) acromegaly  D) goiter
13. Unusable part of hemoglobin of worn-out cells is excreted as A) heme  B) biliverdin  C) bilirubin  D) globin
14. Blood group ‘A’ has antigen ---(A, B) and produces antibody --------- (a, b). A) A, b  B) B, a  C) A, B  D) 0
15. During clotting fibrinogen changes to fibrin in presence of A) activated factor-10  B) prothrombinase  C) thrombinase  D) Mg^{2+}
16. Gray matter of brain is formed of A) myelinated nerve fibers  B) cell bodies and unmyelinated nerve fibers  C) myelinated and unmyelinated nerve fibers  D) neuroglial cells
17. Part of ear responsible for dynamic equilibrium is A) semicircular canals  B) utricle and saccule  C) cochlea  D) all
18. Part of ear responsible for static equilibrium is A) semicircular canals  B) utricle and saccule  C) cochlea  D) all
19. Part of ear responsible for hearing is A) semicircular canals  B) utricle and saccule  C) cochlea  D) all
20. When a receptor cell, in presence of stimulus, stops sending action potentials within a few minutes, it is A) fatigue  B) accommodation  C) adaptation  D) equilibrium

Match the terms

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<tbody>
<tr>
<td>21. 1st, 2nd, and 8th cranial nerves</td>
<td>A. Cone cells</td>
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<tr>
<td>22. 5th, 7th, 9th and 10th cranial nerves</td>
<td>B. Rod cells</td>
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<td>23. Stimulated by dim-light, give b/w image</td>
<td>C. Sensory</td>
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<td>24. Stimulated by bright light, give colored image</td>
<td>D. Oxytocin</td>
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<td>25. Baby birth, milk ejection</td>
<td>E. Mixed</td>
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26. Most abundant WBC, phagocytes | A. Cataract
27. Iodine deficiency causes enlargement of thyroid gland | B. glaucoma
28. Inflammatory response on injury or infection | C. neutrophils
29. Slow developing blindness due to Clouding of lens | D. Goiter
30. Fast developing blindness due to high ocular pressure | E. basophils

Small Answer Questions – Each Question = 2 marks
31. Why nerve impulses pass from dendrites → cell body → axon → terminal knobs?
32. Trace the path of sound energy in ear till its transduction to nerve impulse in ear.
33. With an example, explain the sequence of 3 hormones (hypothalamus – anterior pituitary-endocrine gland).
34. Name 2 hormones secreted by adrenal cortex and 2 hormones by adrenal medulla. Name the major function of adrenal glands.
35. What are blood-platelets? What is their role in blood clotting?

Completion Questions
36. Autonomic NS is formed of ----------------------------- and -----------------------------------------divisions.
37. ----------------------------regulates body temperature, eating and drinking behavior, reproduction and ANS.
38. When eyes are focused on near objects ciliary body muscles are ----------- and suspensory ligaments are ------------- to make lens thick.
39. Sensory cells in macula help to maintain ------------  -------------- and in crista help to maintain ----------  ------------------.
40. All hormones travel through ----------- to their ------------  cells.
41. Low level of Ca²⁺ in plasma causes release of ------------------; High level of Ca²⁺ in plasma causes release of --------------.
42. Chemically 2 main groups of hormones are ----------------- and ---------------.
43. Receptors for polar/ hydrophilic hormones lie mostly ----------------------.
44. Formation new blood cells, ------------------- takes place in spongy bone marrow.
45. High hematocrit value = % of formed elements represent ---------- and low represents --------------.