Examples of questions for the Final Physiology Exam

1. Which hormones are derived from cholesterol?
2. Smooth muscle calcium-induced calcium release channels are located in what part or location of a myocyte?
3. Which one of the following hormones is produced by the kidney?
4. During atrial filling, what is happened with the pressure in the atrium?
5. Which part of nephron is impermeable to water and responsible for active transport of sodium ions?
6. Which of these muscle types is striated and contains gap junctions?
7. Which of the following is a function of neutrophils?
8. Which of the following hormones is directly produced by the kidney?
9. During which phase occurs the second heart sound?
10. What kinds of nerves have the highest conduction velocity?
11. In which lobes are the centers for hearing located?
12. Which of the following organs serves as storage organ of glycogen?
13. Which vessels have the lowest blood pressure?
14. Which hormone stimulates the HCO3 secretion in pancreatic juice?
15. Which of the following are gray matter?
16. Which of these fibers release norepinephrine?
17. Which neurotransmitter is released from axon of the inhibitory interneuron of the spinal cord (Renshaw cell)?
18. Selective destruction of the zona glomerulosa of the adrenal cortex would produce a deficiency of which hormone?
19. What anatomical structure of the cerebrum is important in both learning and memory?
20. Which of the following cells is the most abundant type of granulocyte and the primary cell involved in chemotaxis?
21. Which of the following hormones is secreted by gonadotropes after stimulation by gonadotropin-releasing hormone?
22. Which of these statements about intrapulmonary pressure and intrapleural pressure is true?
23. Which ionic currents cause IPSP (inhibitory postsynaptic potential)?
24. Which of these is a paracrine regulator that causes vasodilatation?
25. If a person increased his tidal volume, what would happen to his alveolar PO2?
26. If aldosterone levels in the blood increases, which of the following ions will be excreted to a greater extent?
27. Which of the following values best represents the normal percentage of eosinophils in the blood?
28. Sensory nerve afferents can release substances that can cause pain. Which of the following substances would be the most likely to be derived from a sensory nerve?
29. How does pH affect digestion in the stomach?
30. Which EEG waves are appeared during REM (rapid eye movement) sleep?
31. Glasses with convex lenses help to correct…
32. Which tissue has the highest blood flow per unit weight?
33. Which neurotransmitters can cause only IPSP on the postsynaptic membrane?
34. Which of the following determines the rate of gas transfer across the alveolar-capillary membrane?

35. Which mechanisms underlies in the consolidation of short-term memory into long-term memory?
36. Flow rate is a measure of:
37. If a poison such as cyanide stopped the production of ATP, which of the following transport processes would cease?
38. Which of the following lung volumes or capacities can be measured by spirometry?
39. Which hypothalamic nucleus is most associated with circadian rhythms or light and dark cycles?
40. Which of the following receptors is activated by membrane depolarization within the T-tubule of a skeletal myocyte?
41. Where is located enterokinase?
42. Which of these acts as a relay center for somatesthetic sensation?
43. Repolarization of an axon during an action potential is produced by…
44. Which of these statements about plasmin is true?
45. What is the value of mean arterial pressure for a person whose systolic pressure is 120 mm Hg and diastolic pressure is 80 mm Hg (was measured on brachial artery):
46. Absorption of salt and water is the principal function of which region of the GI tract?
47. Secretion of HCl in stomach is stimulated by…
48. Which of these sensory modalities is transmitted directly to the cerebral cortex without being relayed through the thalamus?
49. How many cell membranes will O2 cross in its passage between the airspace of the alveolus and binding to hemoglobin?
50. What is a typical numerical value for GFR (Glomerular Filtration Rate)?
51. What does GABA do to the cell`s membrane?
52. The secretion of which of these hormones would be increased in a person with endemic goiter?
53. In case of bacterial infection there is increase in this type of leukocytes…
54. The long duration of the action potential of the ventricular myocardial cells is due to:
55. A person's electrocardiogram (ECG) has no P wave, but has a normal QRS complex and a normal T wave. Therefore, his pacemaker is located in the…
56. Which of these hormones may have a primary role in many circadian rhythms?
57. Which of these neurons are pseudounipolar?
58. If the stroke volume of the left ventricle is 70 ml/beat and the stroke volume of the right ventricle is 71 ml/beat, what will happen to the relative distribution of blood between the systemic and pulmonary circulation after 10 beats?
59. Examination of an isolated cardiomyocyte revealed that it didn't generate excitation impulses automatically. This cardiomyocyte was obtained from:
60. Which of the following types of white blood cells kills parasitic worms, destroys antibody complexes, and inactivates some inflammatory chemicals of allergy?