**Topics of Physiology**

1. The extrinsic, intrinsic pathway for initiating clotting.

**2. The cardiac cycle: diastole and systole, relationship of the Electrocardiogram** **to the cardiac cycle.**

3. The phases of cardiac muscle actionpotential.

**4. The effect of sympathetic and parasympathetic stimulation on cardiac output.**

**5. The Renin-Angiotensin-Aldosteron** **system.**

**6. The oxygen-hemoglobin dissociation curve.**

**7. The pulmonary volumes** **and capacities, obstructive syndrome.**

**8. The respiratory centers.**

**9. The neural control of gastrointestinal function - enteric nervous system.**

**10. The basic mechanism of hydrochloric acid secretion, regulation of gastric acid secretion.**

**11. The pancreatic digestive enzymes and regulation of pancreatic secretion.**

**12. The Glomerular Filtration Rate (GFR), and the factors affect GFR.**

13. The hormonal control of tubular reabsorption

**14. Proximal tubular reabsorption**

**15. The hormones of anterior Pituitary gland.**

**16. The functions of Thyroid hormones.**

**17. The effects of Insulin on carbohydrate, protein, lipid metabolism.**

**18. The motor cortex and Corticospinal (Pyramidal) tract.**

**19. The functions of hypothalamus.**

**20. The cerebrospinal fluid system: formation, flow, and absorption.**

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