

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

1. Neurons used electrical and chemical signals to communicate with one another at contact points called synapse.
  - (a) What is action potential? (10%)
  - (b) Explain one kind of synaptic neurotransmission in detail. (10%)
2. Please describe the fat absorption across the epithelial cells of the small intestine in detail. (10%)
3. Please describe how glucose, triglyceride, and amino acids in GI tract are processed during absorptive and postabsorptive states. (20%)
4. Describe the characteristics of the two limbs of the loop of Henle with regard to their transport of sodium ion, chloride ion and water (10%).
5. What are major factors determine cardiac output? (10%)
6. Which respiration steps occur by diffusion and which by bulk flow? (10%)
7. Describe targets and major functions of the six classical anterior pituitary gland hormones. (20%)