

一、知覺心理學問答題 (6 題，共 50 分)

1. (a) Describe the signal detection theory. [Hint: The complete answer should include the definition of hit rate, false alarm rate, d' and beta. (5 分) (b) What is threshold in the context of the signal detection theory? (3 分)
2. (a) Draw a graph (with appropriate axis labels) of the dark adaptation curve. (4 分) (b) Describe the methodology used to isolate the rod component of the curve, and the cone component. (4 分)
3. State, define, and give an example (in words and/or drawings) for five Gestalt principles of perceptual organization. (9 分)
4. (a) Define inattention blindness. (3 分) (b) Describe the method and results of Simons and Chabris (1999) research on inattention blindness. (5 分)
5. Does retinal physiology support the trichromatic theory, opponent-processing theory, or both? Support your answer. (9 分)
6. (a) How are random-dot stereograms created? (2 分) (b) What is the importance of random-dot stereograms? (3 分) (c) How is the correspondence problem related to the concept of random-dot stereograms? (3 分)

二、生理心理學問答題 (5 題，共 50 分)

1. Ion channels can be disrupted in many ways. Describe three types of toxins that can interfere with normal ion channel function. Explain their origins and how they work. (10 分)
2. (a) How does a sensory system code a wide range of stimulus intensities? (5 分) (b) What is meant by "sensory adaptation," and what is the significance of this phenomenon? (5 分)
3. Describe two ways in which data from patients with Parkinson's disease and patients with schizophrenia overlap, and discuss how this overlap lends support to the dopamine hypothesis of schizophrenia. (10 分)
4. Compare and contrast the symptoms and neuroanatomy of the major categories of aphasia. (10 分)
5. Discuss the six strategies used to lose weight and some of the reasons that it is difficult for obese people to lose weight. (10 分)