

請按照題號順序作答，免抄題目，答案需寫在答審卷上。

1. Many endocrine glands produce multiple hormones. Choose *two hormones* from column B that are secreted by each gland listed in column A. (20%)

**Column A**

- \_\_\_\_\_ (1) Adrenal gland
- \_\_\_\_\_ (2) Neurohypophysis of pituitary gland
- \_\_\_\_\_ (3) Ovaries
- \_\_\_\_\_ (4) Pancreas
- \_\_\_\_\_ (5) Thyroid gland

**Column B**

- (a) Antidiuretic hormone
- (b) Calcitonin
- (c) Cortisol
- (d) Estrogen
- (e) Glucagon
- (f) Insulin
- (g) Norepinephrine
- (h) Oxytocin
- (i) Progesterone
- (j) Thyroid hormone

2. Please compare the paired terms. (40%)

- |                                   |                                |
|-----------------------------------|--------------------------------|
| A. Euchromatin vs Heterochromatin | B. Endoskeleton vs Exoskeleton |
| C. Rotifera vs Nematoda           | D. Cilia vs Flagella           |
| E. Gametes vs Zygotes             | F. Axon vs Dendrites           |
| G. Nucleus vs Ganglion            | H. RBC vs WBC                  |
| I. Brachiopoda vs Echinodermata   | J. White matter vs Gray matter |

3. Please explain why cardiovascular diseases are the leading cause of death in the United States & most other developing nations. (10%)

4. List & describe briefly the similarities & dissimilarities for the five immunoglobulins (Ig). (10%)
5. Please explain how the nervous system & hormones regulate kidney functions ? (10%)
6. Define the biological magnification & greenhouse effect. (10%)