國立中央大學九十一學年度轉學生入學試題卷

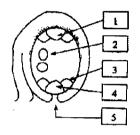
生命科學系 二年級 科目:普通生物學 共 之 頁 第 / 頁

Plant Biology

Part 1. There are five boxes numbered from 1 through 5 that are needed to be filled in order to complete the diagram of the plant life cycle. Please match the letters representing the correct terms for each number. (10%)

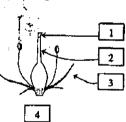
Gamete Gametophyte C. D. **Spore** Sporophyte E. Zygote 5

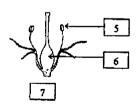
Part HI There are five boxes numbered from 1 through 5 that are needed to be filled in order to complete the diagram of the angiosperm megagametophyte. Please match the letters representing the correct terms for each number, (10%)

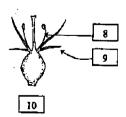


- Antipodal
- Megagamete
- Micropyle
- D. Polar nucleus
- E. Synergid

Fact 11. There are ten boxes numbered from 1 through 10 that are needed to be filled in order to complete the diagram of the plant flowers. Please match the letters representing the correct terms for each number. (20%)

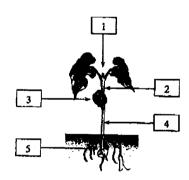






- A. Anther
- B. Epigynous
- C. Filament
- D. Hypogynous
- E. Ovary
 F. Perigynous
- G. Petal
- H. Sepal
- I. Stigma
- J. Style

Part IV. There are five boxes numbered from 1 through 5 that are needed to be filled in order to complete the diagram of an angiosperm seedling. Please match the letters representing the correct terms for each number. (10%)



- A. Apex
 B. Cotyledon
 C. Epicotyl
- D. Hypocotyl
- E. Radical



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生命科學系 二年級 科目:普通生物學 共 二頁 第 之 頁

Zoology and Evolution

Please answer the following questions:

- t. Please describe the function of the following organelles or structures: (20%)
 - a) Centriole
- b) Centrosome
- c) Bowman's capsule
- d) Schwann cell
- e) Sarcomere
- 2. Compare the following terms (10%)
 - a) Celiular immune response & humoral immune response
 - b) Lymphokines & cytokines
- 3. What is Hardy-Weinberg principle? What assumptions have to meet for the Hardy-Weinberg principle to be true? (10%)
- 4. Please describe the hormones secreted by the anterior pituitary gland and the major target organ of each hormone? (10%)

