

1. Describe the definition, morphological change and mechanism of apoptosis. (16%)
2. Describe the cancer-related gene groups and give 3 example genes in each group. (16%)
3. Describe the pathology of primary atypical pneumonia. (16%)
4. Describe the pathology of spontaneous cerebral hemorrhage. (16%)
5. The question refers to Hodgkin disease.
- 1) Describe the morphology and immunophenotype of the Reed-Sternberg (RS) cells. (10%)
- 2) There are long-standing controversies on the lineage of RS cells. Currently, it is thought that RS cells are derived from B-cells. Why and why not? (10%)
6. There are 4 types of immunologically mediated disorders, including the anaphylactic type, the cytotoxic type, the immune complex type, and the cell mediated type. Copy the table to your answer sheet, and give one example for each type, describe briefly the mechanism, and compare the pathological and clinical differences among the 4 types. (16%)

	Anaphylactic	Cytotoxic	Immune Complex	Cell-mediated
Name the disease				
Mechanism				
Pathological finding				
Clinical finding				