

考生注意: 1. 依次序作答, 只要標明題號, 不必抄題。

2. 答案必須寫在答案卷上, 否則不予計分, 並限以藍黑色筆作答。

3. 試題隨卷繳回。(餘請詳閱試場規則)

Analytical Chemistry

1. Define the following terms in analytical chemistry: (32 points, 8 points/each)

- (1) pH
- (2) Plasma
- (3) Accuracy
- (4) Buffer capacity

2. Briefly describe the principle and applications of photoacoustic spectroscopy? (8 points)

3. Optical spectroscopic methods are generally based on six basic phenomena. Please name these six basic phenomena. (24 points)

4. Name three kinds of mass analyzer in mass spectrometry and briefly describe their respective principles and advantages. (36 points)