

科目：分析化學

適用：應化系

編號：372

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。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

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第 1 頁

Analytical Chemistry

1. Define the following terms in analytical chemistry:
(70 points, 5 points each)

- (1) Accuracy
- (2) pH
- (3) pI
- (4) Buffer solution
- (5) Precision
- (6) Chemiluminescence
- (7) Significant figures
- (8) Limit of detection
- (9) Matrix effects
- (10) Scanning probe microscopy
- (11) Charge transfer device
- (12) Chromatography
- (13) Mass spectroscopy
- (14) Electrochemistry

2. Briefly describe the theory of Beer's law. (6 points)
3. Briefly describe the principles and applications of Fourier transform in analytical chemistry. (12 points)
4. Briefly describe the main applications of separation techniques in analytical chemistry. (12 points)