

系所組：化學系應用化學碩士班

日期節次：102 年 3 月 15 日第 1 節 9:00~10:30

科目：有機化學與分析化學

M-3-1

(I) Define the following terms: (5 points each)

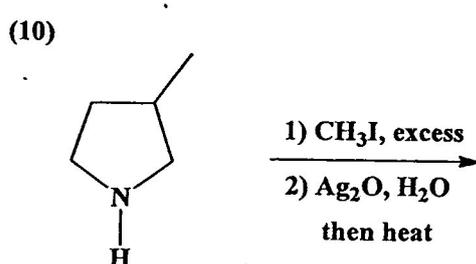
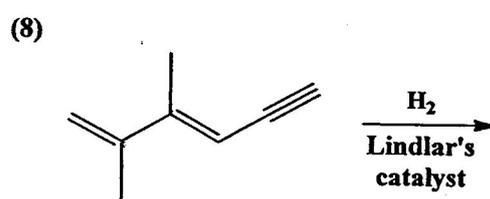
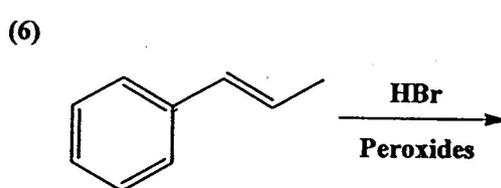
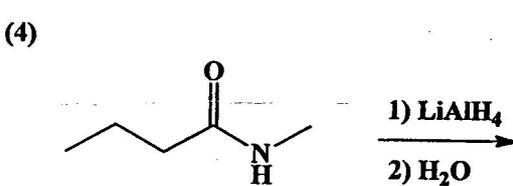
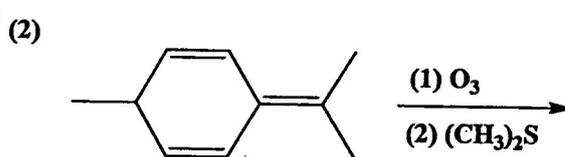
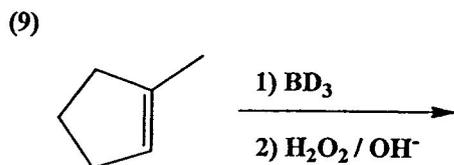
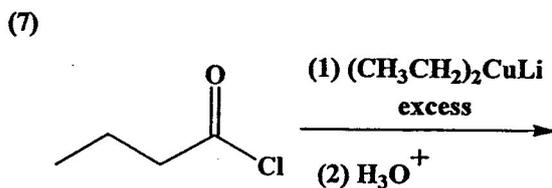
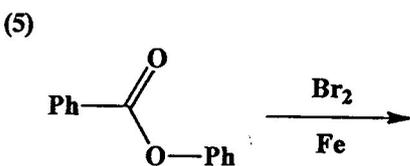
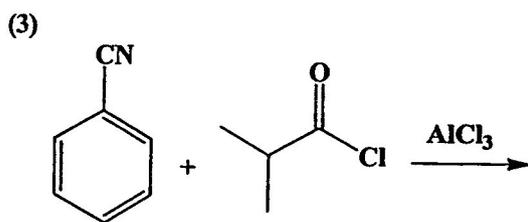
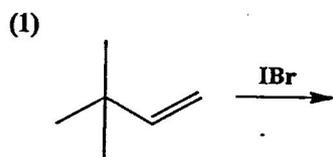
(a) Organic Chemistry

(b) Functional Groups

(c) Lewis acid and Lewis base

(d) Aromatic Compounds, Antiaromatic Compounds, Nonaromatic Compounds and Aliphatic Compounds

(II) Give the structures of the major organic products of the following reactions: 3 points each



本試題採
雙面印刷

第 1 頁共 2 頁

系所組：化學系應用化學碩士班

日期節次：102 年 3 月 15 日第 1 節 9:00~10:30

科目：有機化學與分析化學

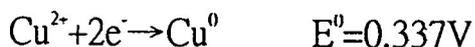
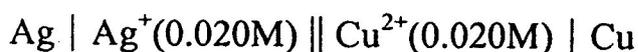
二.分析化學(50%)可以使用非記憶型計算機

1.(30%)每小題 3%，解釋下列專有名詞

- | | |
|------------------------|---------|
| a. PH | f. FTIR |
| b. ppm | g. SEM |
| c. Analytical molarity | h. DSC |
| d. Common ion effect | i. CV |
| e. EDTA(全名與結構式) | j. NMR |

2.(5%)請說明 Brønsted-Lowry 的酸鹼定義為何?

3.(5%)請計算下列電池電位多少?



4.(5%)請說明光譜分析中，Beer's law 使用上的限制。

5.(5%)請說明 internal standard 與 external standard 與 standard addition

分析法上的差別

本試題探
双面印刷

第2頁共2頁