

系所(組)別：應用化學所

M-3-1

考試科目：有機化學與分析化學

- 一、 Explain/Define the following terms:(2 pts each; 10 pts total)
 (1) Species analysis (2) Transmittance (3) Beer's Law (4) LPME
 (5) Accuracy
- 二、 (1) How many theoretical plates produce a chromatography peak eluting at 12.83 min with a width at half-height of 8.7 s? (5 pts)
 (2) The length of the column is 15.8 cm. Find the plate height. (5 pts)
- 三、 For the numbers 116.0, 97.9, 114.2, 106.8, and 108.3, find the mean, standard deviation, and 90% confidence interval from the mean? (10 pts)
- 四、 Explanation the factors affect the resolution of chromatography. (10 pts)
- 五、 What kinds of matrix modifier were used for GFAA ? (5 pts)
 What is the purpose of a matrix modifier in atomic spectroscopy? (5 pts)

Values of Student's t

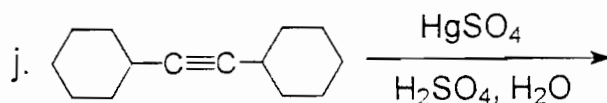
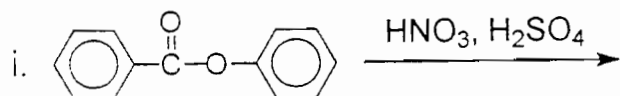
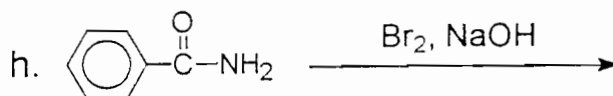
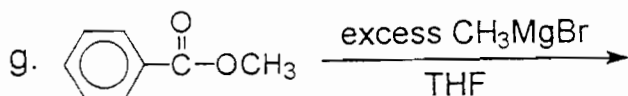
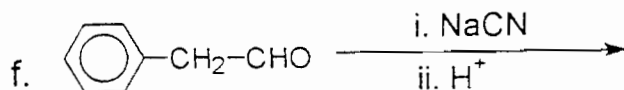
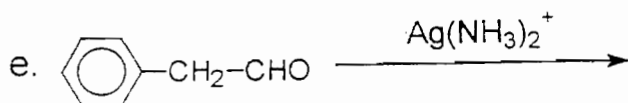
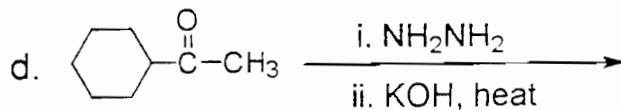
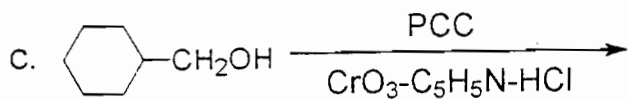
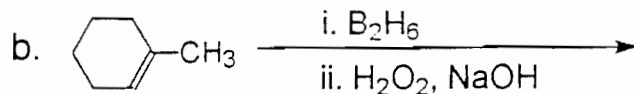
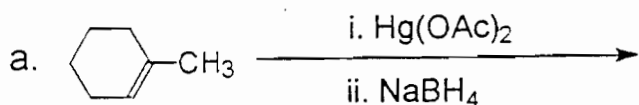
Degrees of freedom	Confidence level (%)		
	90	95	98
3	2.353	3.182	4.541
4	2.132	2.776	3.747
5	2.015	2.571	3.365

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六. Reactions. (3 pts. each; 30 pts. total.)



七. Synthesis. (10 pts. each; 20 pts. total.)



本試題採
雙面印刷

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