國立高雄師範大學 101 學年度學士班轉學生招生考試試題

系所別：化學系三年級

科　目：有機化學

※注意：1.不必抄題，作答時請將試題題號及答案依照順序寫在答案卷上，於本試題上作答者，不予計分。

2.限用藍色或黑色之鋼筆、原子筆作答，以鉛筆或其他顏色作答者不予計分。

一、簡答題：（每題 10%，共 30%）

1. 寫出下列化合物之正確化學結構式

(1) Neopentylbromide；　　(2) Benzylalcohol；

(3) 3-vinylcycohexene；　　(4) m-methoxybenzoic acid

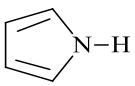
2. 化合物

(1) cis-1,3-diethylcyclohexane 或

(2) trans -1,3-diethylcycohexane 中，何者有較安定之 conformational structure ?

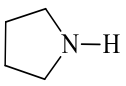
請簡述理由

3. 請將下列化合物依其鹼性大小排序? 簡述理由

(1) 

；

(2) $CH_3CH_2NH_2$ ；

(3) 

與

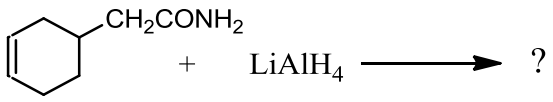
(4) 

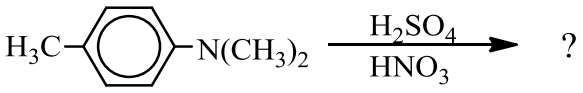
（背面有題　續翻背面）

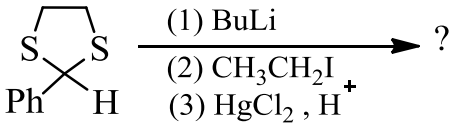
系所別：化學系三年級

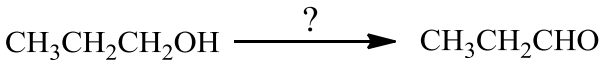
科　目：有機化學

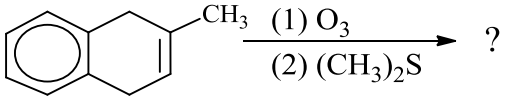
二、寫出下列反應主要產物之化學結構式或其反應試劑：（每題 4%，共 20%）

1. 

2. 

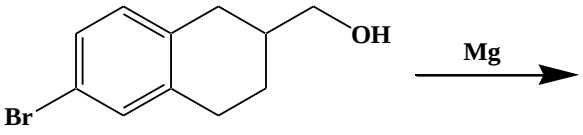
3. 

4. 

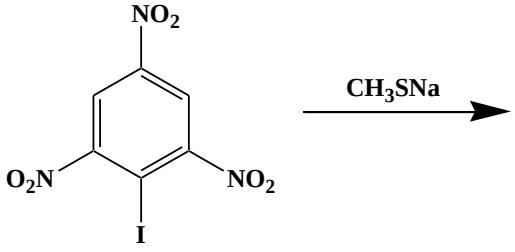
5. 

三、請回答下列問題：（每題 10%，共 50%）

1. Please give the major product for the reaction listed below.



2. Please give the major product for the reaction listed below.

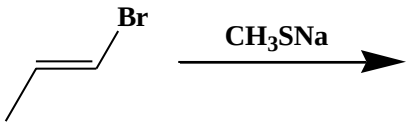


系所別：化學系三年級

科　目：有機化學

3. Please list the ^{1}H NMR chemical shift value (ppm) of $CHCl_3$.

4. Please give the major product for the reaction listed below.



5. Ple`ase write down the required reaction reagents to finish the reaction listed below.