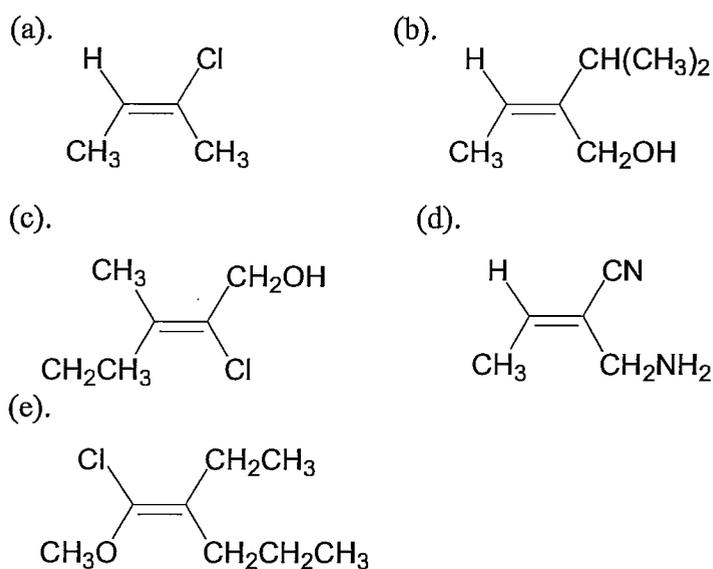


大同大學 九十二 學年度 轉學考試 試題

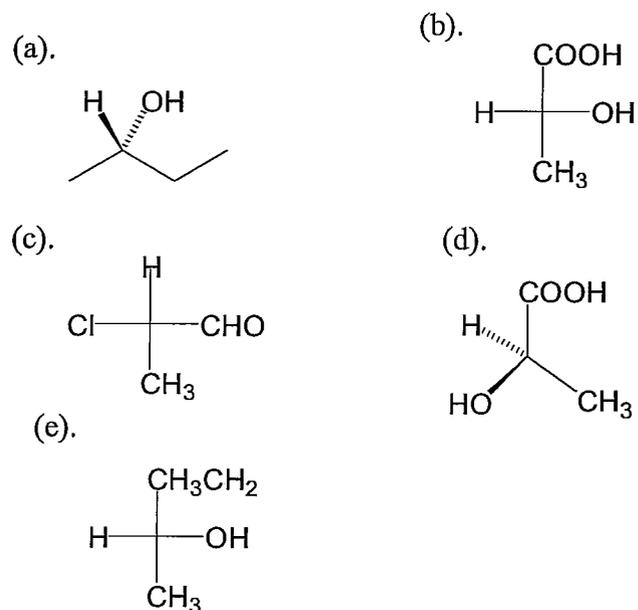
考試科目：有機化學 系別：化學工程學系 第 / 頁，共 2 頁

註：本次考試不可以參考自己的書籍及筆記； 不可以使用字典； 不可以使用計算器。

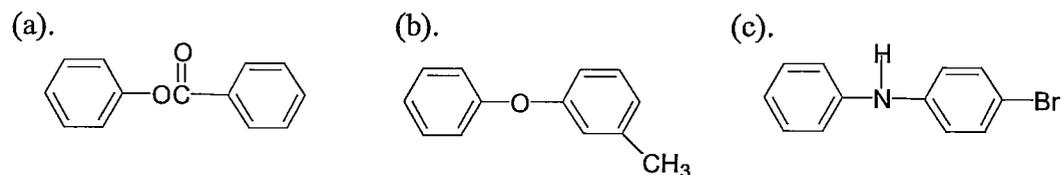
1. Assign E or Z configuration to each of the following alkenes. (15%)



2. Assign R or S configuration to the chirality centers in the following molecules. (10%)



3. Write the product to indicate at what position, and on what ring would you expect the following substances to undergo nitration reaction. (9%)



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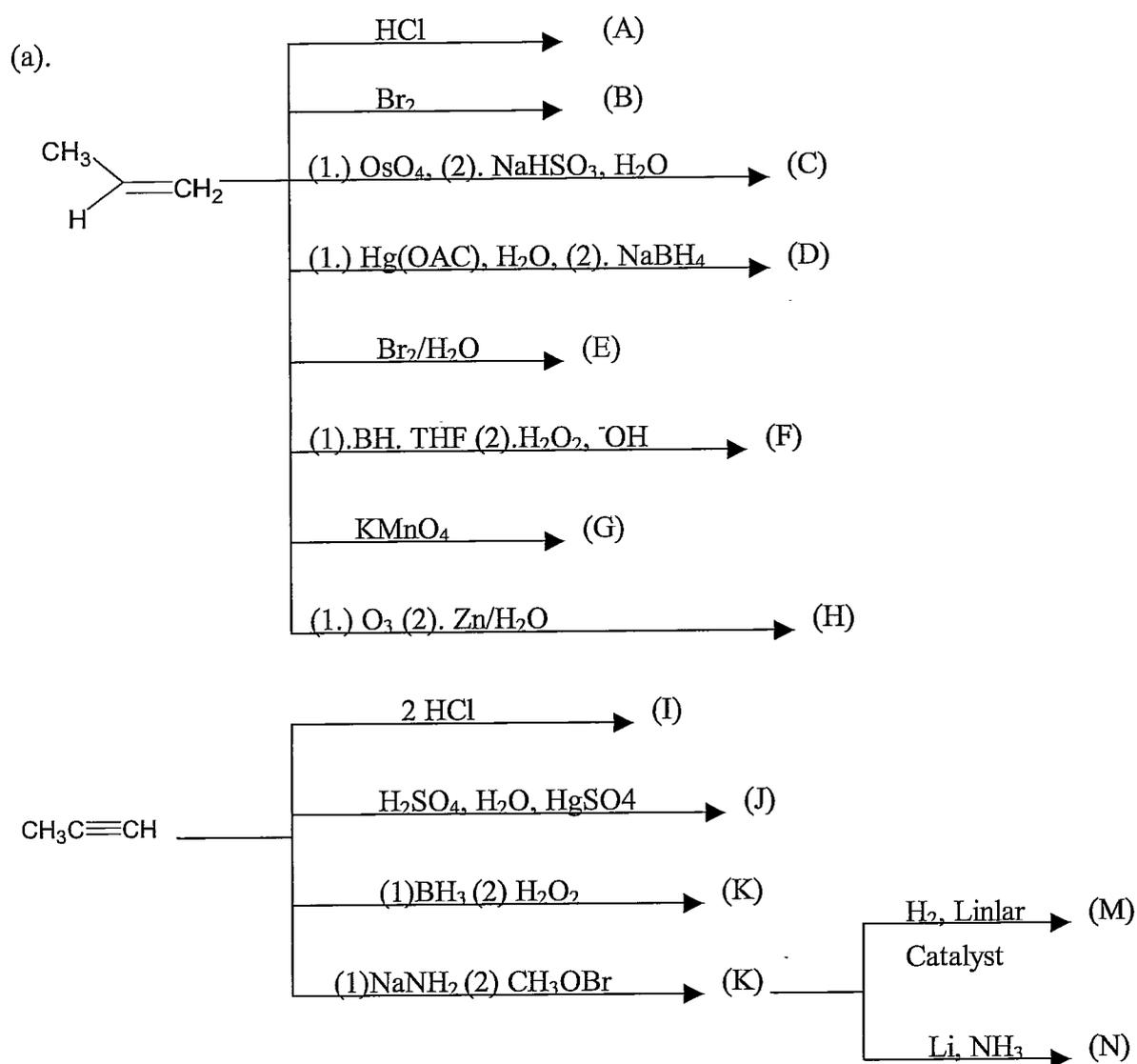
考試科目：有機化學 系別：化學工程學系 第 2 頁，共 2 頁

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4. Which reaction in each of the following pairs would you expect to be faster ? (9%)

- (a). The S_N2 displacement by I^- on CH_3Cl or on CH_3Otos .
 (b). The S_N2 displacement by $CH_3CO_2^-$ on bromoethane or on bromocyclohexane.
 (c). The S_N2 displacement by on 2-bromopropane by $CH_3CO_2^-$ or by CN^- .

5. Predict the major product in each of the following reaction.(42%)



6. Identify the reagents represented by the letters a-e in the following scheme. (15%)

