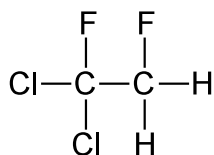


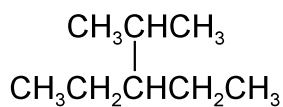
Organic Chemistry Practice 2

ANSWERS

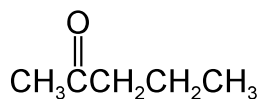
1. (a) Family: alkyl halides



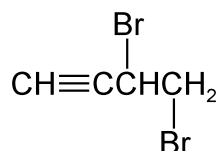
- (b) Family: alkanes



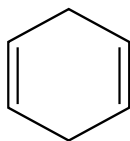
- (c) Family: ketones



- (d) Family: alkynes, alkyl halides



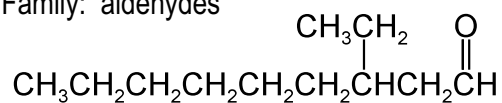
- (e) Family: alkenes



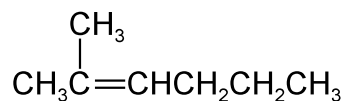
- (f) Family: ethers



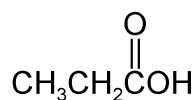
- (g) Family: aldehydes



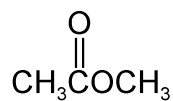
- (h) Family: alkenes



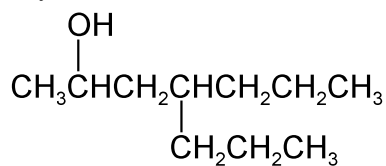
- (i) Family: carboxylic acids



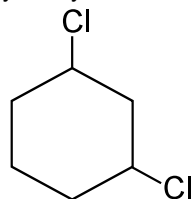
- (j) Family: esters



- (k) Family: alcohols

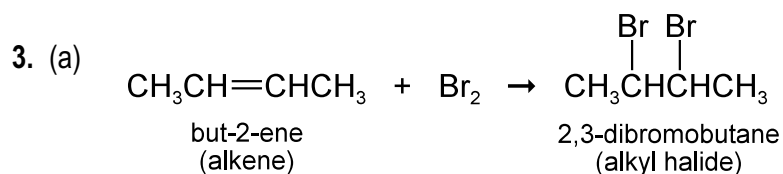


- (l) Family: alkyl halides

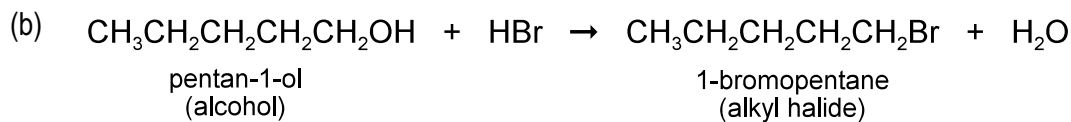


2.

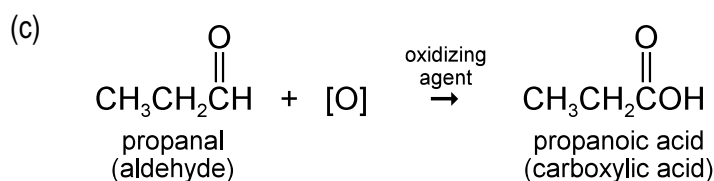
| Nonsystematic Name | Systematic Name | Structure |
|--------------------|-----------------|---|
| acetylene | ethyne | $\text{CH}\equiv\text{CH}$ |
| formaldehyde | methanal | $\begin{array}{c}\text{O} \\ \parallel \\ \text{HCH}\end{array}$ |
| acetaldehyde | ethanal | $\begin{array}{c}\text{O} \\ \parallel \\ \text{CH}_3\text{CH}\end{array}$ |
| acetone | propan-2-one | $\begin{array}{c}\text{O} \\ \parallel \\ \text{CH}_3\text{CCH}_3\end{array}$ |
| formic acid | methanoic acid | $\begin{array}{c}\text{O} \\ \parallel \\ \text{HCOH}\end{array}$ |
| acetic acid | ethanoic acid | $\begin{array}{c}\text{O} \\ \parallel \\ \text{CH}_3\text{COH}\end{array}$ |



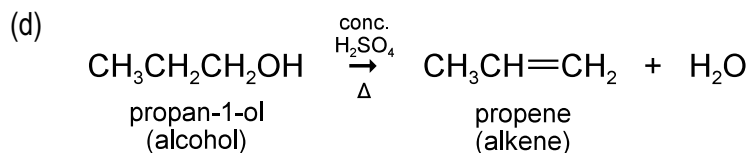
ADDITION REACTION — HALOGENATION



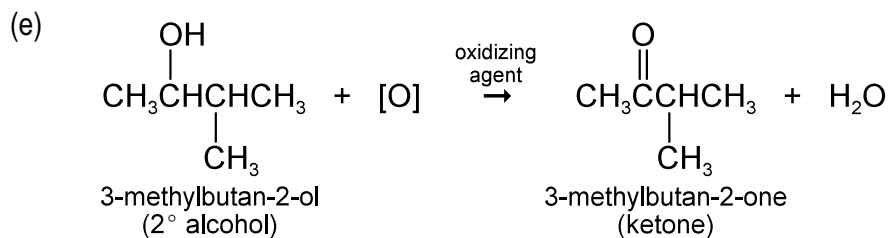
SUBSTITUTION REACTION



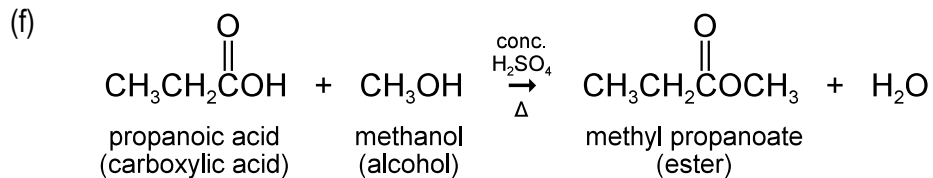
CONTROLLED OXIDATION



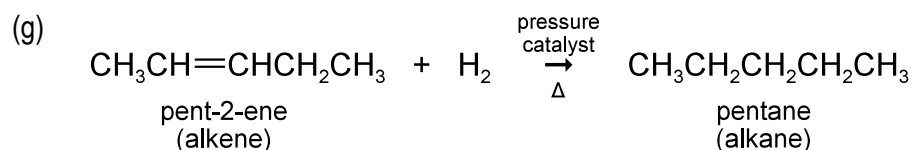
ELIMINATION REACTION — DEHYDRATION



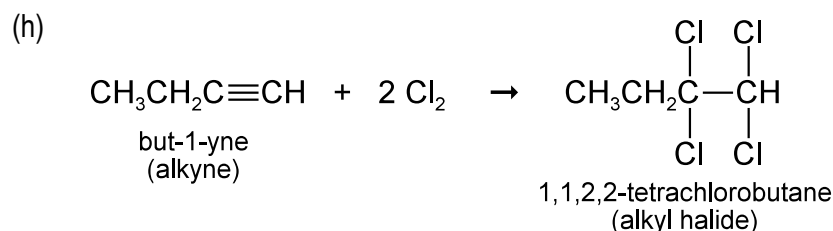
CONTROLLED OXIDATION



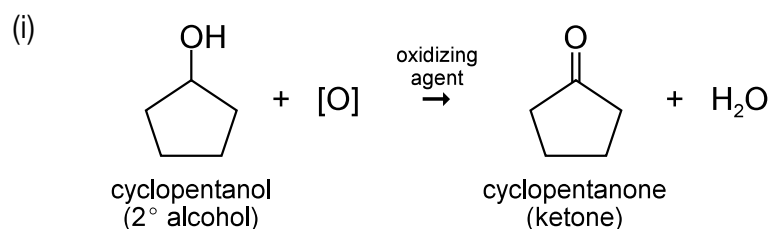
CONDENSATION REACTION — ESTERIFICATION



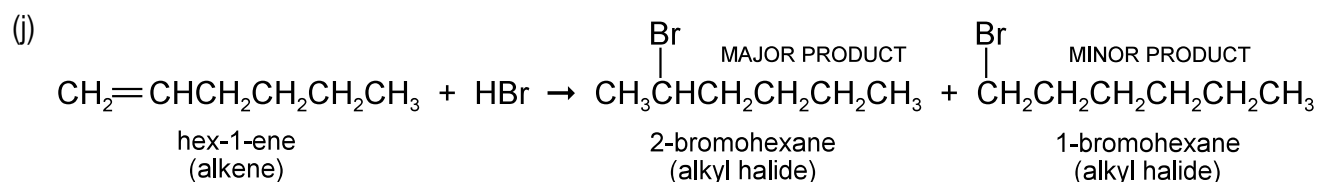
ADDITION REACTION — HYDROGENATION



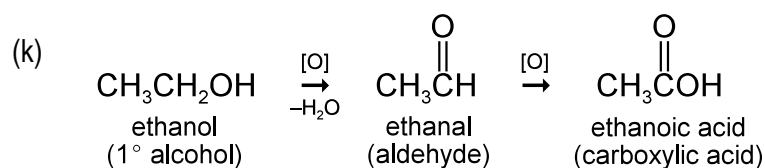
ADDITION REACTION — HALOGENATION



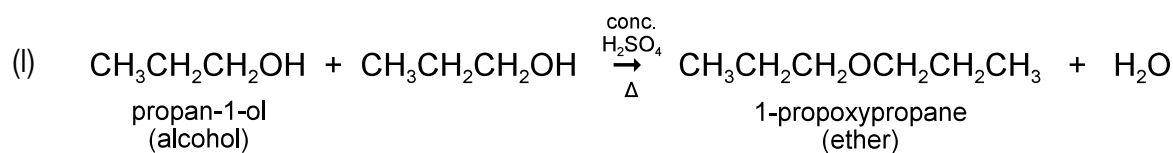
CONTROLLED OXIDATION



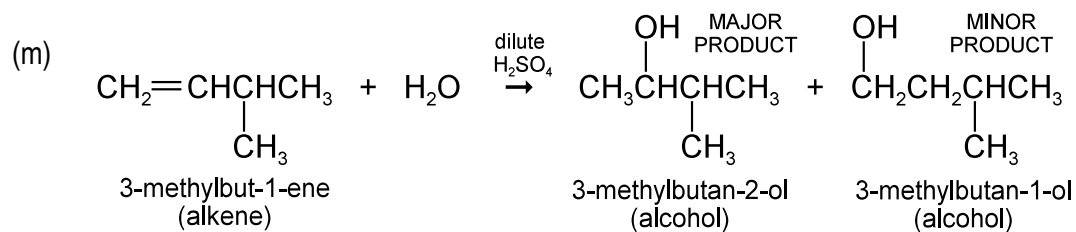
ADDITION REACTION — HYDROHALOGENATION



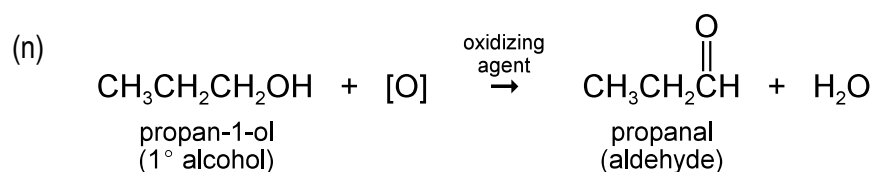
CONTROLLED OXIDATION



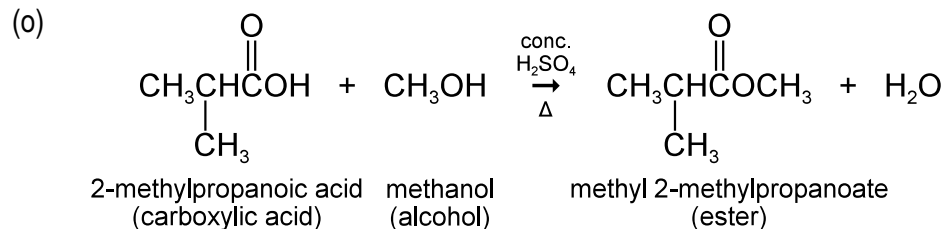
CONDENSATION REACTION



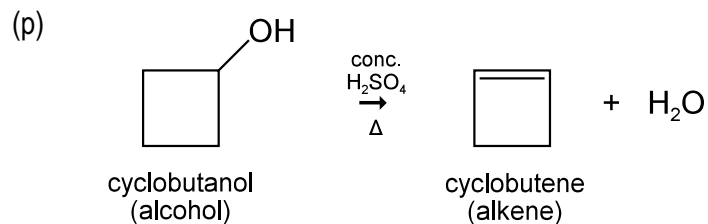
ADDITION REACTION — HYDRATION



CONTROLLED OXIDATION



CONDENSATION REACTION — ESTERIFICATION



ELIMINATION REACTION — DEHYDRATION