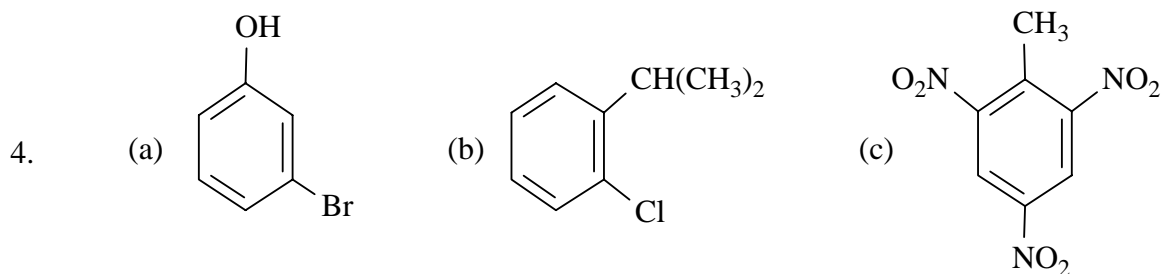


ANSWERS TO ORGANIC PROBLEM SET 3

1. (a)  $\text{HOCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3$   
1-pentanol
- (b)  $\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_2\text{CH}_2\text{CH}_3 \\ | \\ \text{OH} \end{array}$  2-pentanol
- (c)  $\begin{array}{c} \text{CH}_3\text{CH}_2 - \text{CH} - \text{CH}_2\text{CH}_3 \\ | \\ \text{OH} \end{array}$  3-pentanol
- (d)  $\begin{array}{c} \text{HOCH}_2 - \text{CH} - \text{CH}_2\text{CH}_3 \\ | \\ \text{CH}_3 \end{array}$  2-methyl-1-butanol
- (e)  $\begin{array}{c} \text{OH} \\ | \\ \text{CH}_3\text{C} - \text{CH}_2\text{CH}_3 \\ | \\ \text{CH}_3 \end{array}$  2-methyl-2-butanol
- (f)  $\begin{array}{c} \text{OH} \\ | \\ \text{CH}_3\text{CH} - \text{CH} - \text{CH}_3 \\ | \\ \text{CH}_3 \end{array}$  3-methyl-2-butanol
- (g)  $\begin{array}{c} \text{CH}_3\text{CH} - \text{CH}_2\text{CH}_2\text{OH} \\ | \\ \text{CH}_3 \end{array}$  3-methyl-1-butanol
- (h)  $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3\text{C} - \text{CH}_2\text{OH} \\ | \\ \text{CH}_3 \end{array}$  2,2-dimethyl-1-propanol

2. (a)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CHO}$   
pentanal
- (b)  $\begin{array}{c} \text{CH}_3\text{CH} - \text{CH}_2\text{CHO} \\ | \\ \text{CH}_3 \end{array}$  3-methylbutanal
- (c)  $\begin{array}{c} \text{CH}_3\text{CH}_2\text{CH} - \text{CHO} \\ | \\ \text{CH}_3 \end{array}$  2-methylbutanal
- (d)  $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3\text{C} - \text{CHO} \\ | \\ \text{CH}_3 \end{array}$  2,2-dimethylpropanal

3. (a) *m*-bromoaniline (or *m*-bromoaminobenzene)  
 (b) *p*-nitrophenol (or *p*-nitrohydroxybenzene)  
 (c) 2,4-dimethylbenzoic acid  
 (d) 4-ethyl-2-methylchlorobenzene  
 (e) 2,3,5-trichlorobenzaldehyde



5.

