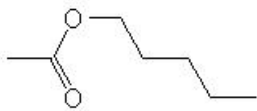
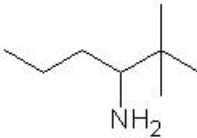
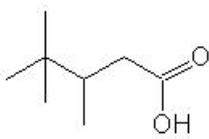
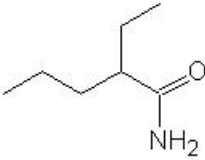

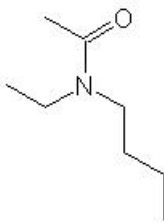
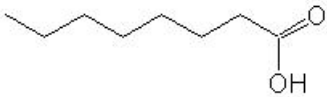
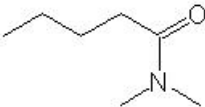
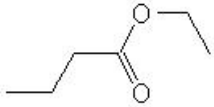
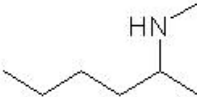


Name: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

[20 pt] 1. Give the IUPAC name of the following molecules

(a) 	(b) 
(c) 	(d) 
(e) 	(f) 
(g) 	(h) 
(i) 	(j) 

[20 pt] 2. Draw the following molecules using line structures or Lewis structures:

(a) ethyl 2-methylbutanoate

(f) 2,3-dimethylpentanamide

(b) 3-methylbutyl propanoate

(g) o-methylbenzoic acid

(c) 2-propylpentanoic acid

(h) ethanoic acid

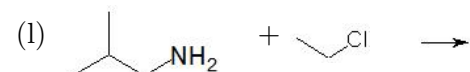
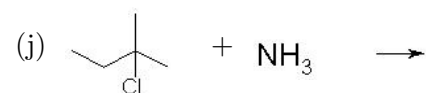
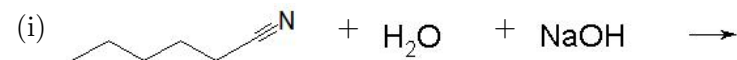
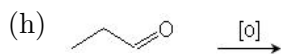
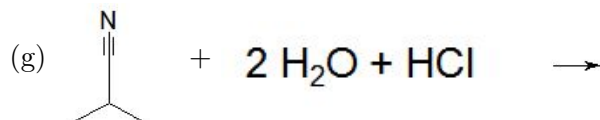
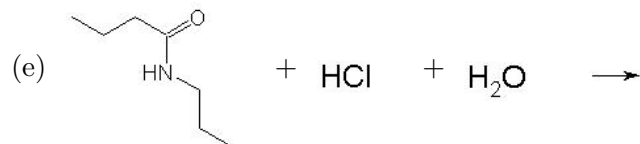
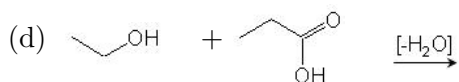
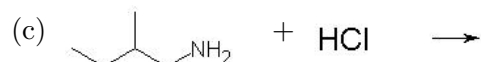
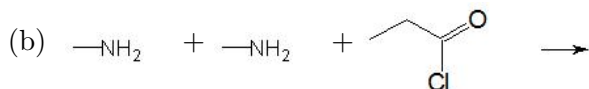
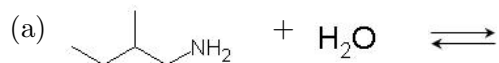
(d) 2,3,4-trimethyl-3-pentanamine

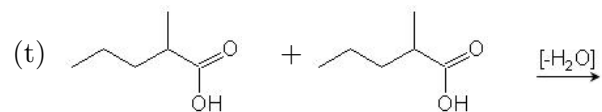
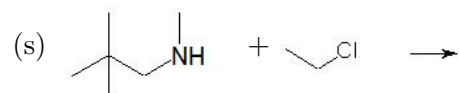
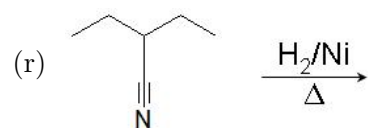
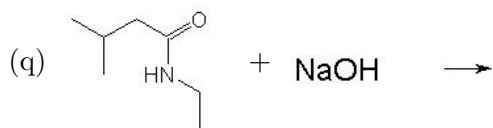
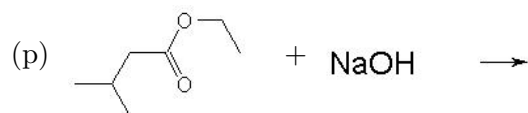
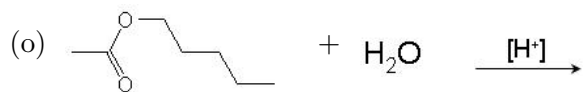
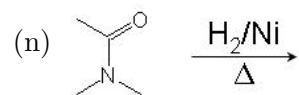
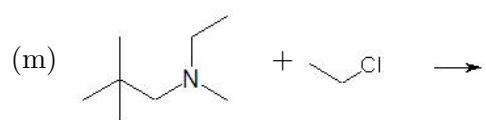
(i) 1-pentyl ethanoate

(e) N,N,2-trimethylbutanamide

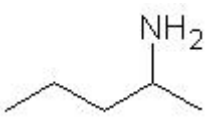
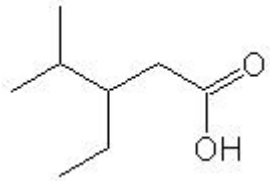
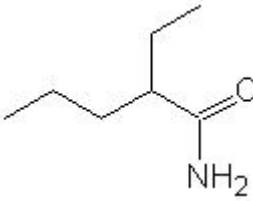
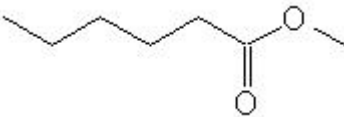
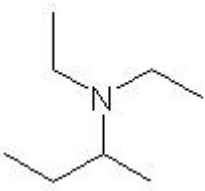
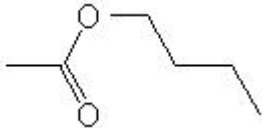
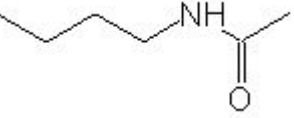
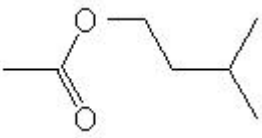
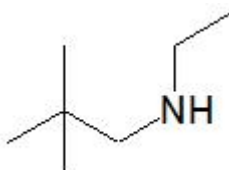
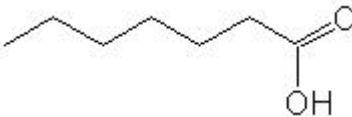
(j) N-ethyl-3,3-dimethylbutanamide

[40 pt] 3. Complete the following reactions in the format given. Assume all substitution reactions are mono-substitutions only. If one product is favored in a reaction circle that product. Include states where appropriate. Be sure to balance any combustion reactions. If no reaction occurs put NR for the products.





[20 pt] 4. Give the IUPAC name of the following molecules

<p>(a) </p>	<p>(b) </p>
<p>(c) </p>	<p>(d) </p>
<p>(e) </p>	<p>(f) </p>
<p>(g) </p>	<p>(h) </p>
<p>(i) </p>	<p>(j) </p>

[20 pt] 5. Draw the following organic molecules:

(a) decanoic acid

(f) 4,4-dimethylhexyl 3-methylbutanoate

(b) 2-methylpentyl 4-chlorobutanoate

(g) 2,3,3-trimethyl-2-butanamine

(c) octanamide

(h) N-ethyl-3,3-dimethylbutanamide

(d) 2-methyl-2-propanamine

(i) 2-hydroxy-3-pentanamine

(e) 3-phenylhexanoic acid

(j) benzoic acid

[45 pt] Complete the following reactions in the format given. If one product is favoured in a reaction, circle that product. Include states where appropriate. Be sure to balance any combustion reactions. If no reaction occurs put NR for the products.

