



# IR PROBLEMS 4

1	E = $C_5H_{11}Br$	$\begin{array}{c} CH_3 \\   \\ CH_3 - C - CH_2 \\   \quad   \\ CH_3 \quad Br \end{array}$	
	F	$\begin{array}{c} CH_3 \\   \\ CH_3 - C - CH_2 \\   \quad   \\ CH_3 \quad OH \end{array}$	alcohol OH 3230-3550 $cm^{-1}$
	G	$\begin{array}{c} CH_3 \quad O \\   \quad    \\ CH_3 - C - OH \\   \\ CH_3 \end{array}$	acid O-H 2500-3000 $cm^{-1}$
	m/z 150	$[C_5H_{11}Br]^{+}$	
	m/z 152	$[C_5H_{11}Br]^{+}$	
	<u>NB</u> Alcohol F cannot dehydrate.		
2	H	$\begin{array}{c} Br \\   \\ CH_3 - CH - CH_3 \end{array}$	3
	I	$\begin{array}{c} OH \\   \\ CH_3 - CH - CH_3 \end{array}$	1 alcohol O-H 3230-3550 $cm^{-1}$
	J	$\begin{array}{c} O \\    \\ CH_3 - C - CH_3 \end{array}$	2 C=O 1680-1750 $cm^{-1}$