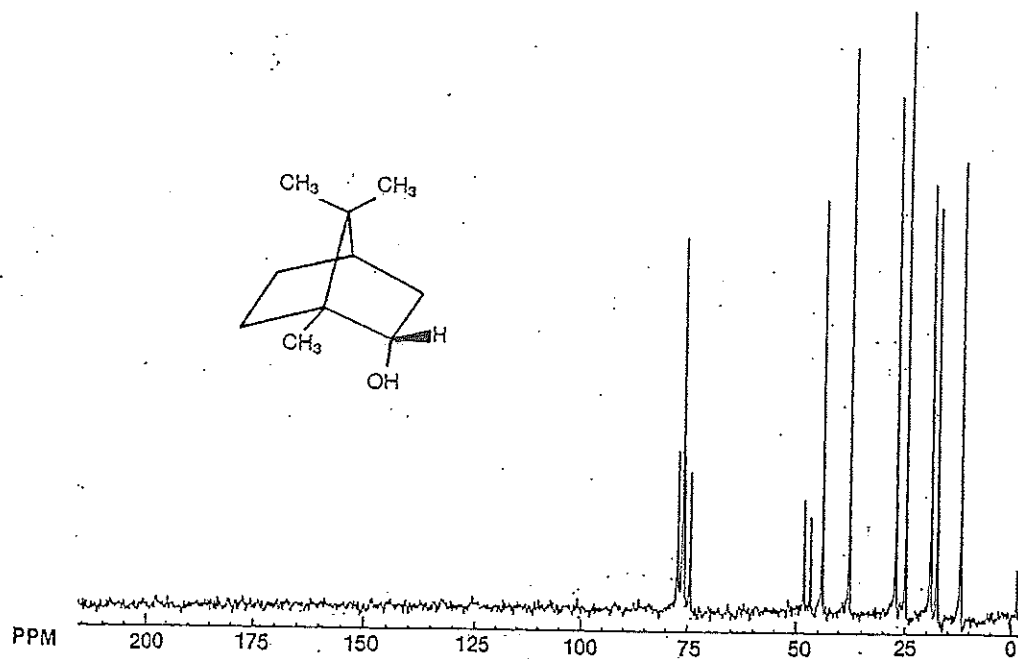
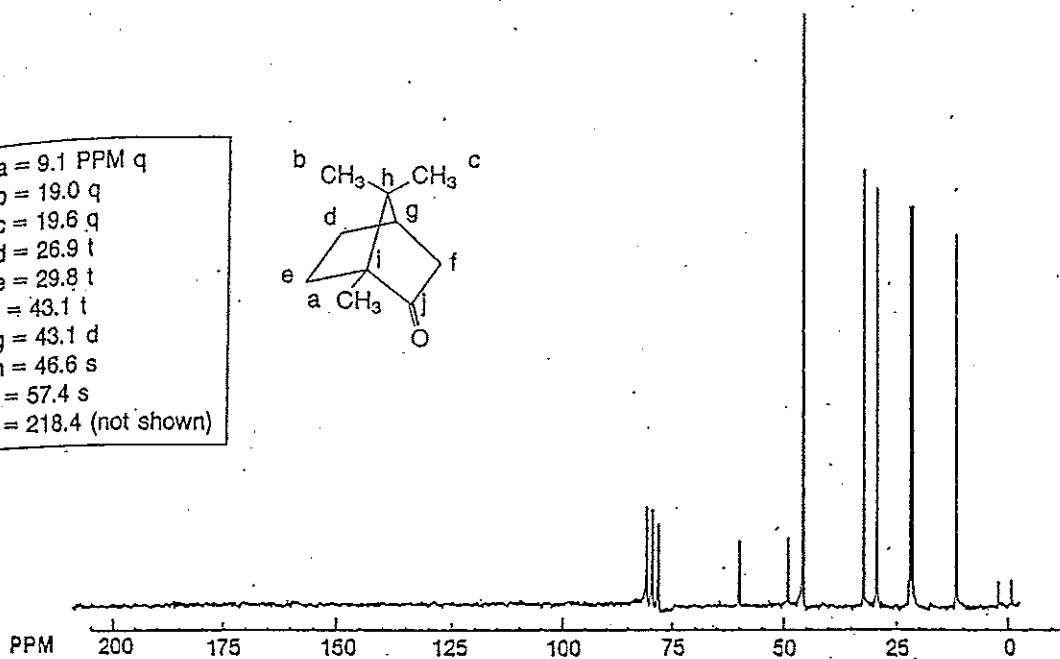
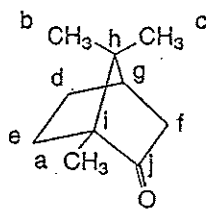


(a)

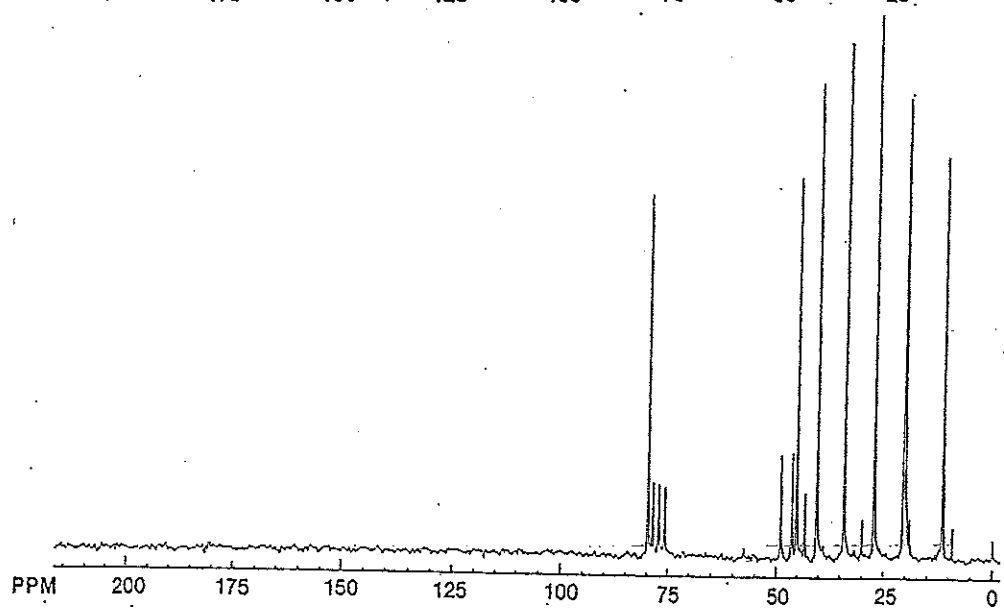


(b)

a	= 9.1 PPM	q
b	= 19.0	q
c	= 19.6	q
d	= 26.9	t
e	= 29.8	t
f	= 43.1	t
g	= 43.1	d
h	= 46.6	s
i	= 57.4	s
j	= 218.4	(not shown)



(c)



Figures: Borneol Redox Scheme: ^{13}C NMR spectra of starting materials and expected products in CDCl_3 ; (a) $\xrightarrow{\text{NaOC}/\text{CH}_3\text{COOH}}$ (b) $\xrightarrow{\text{NaBH}_4/\text{H}_2\text{O}}$ (c)