

DEPT

TABLE 19.12 Orientation of ^{13}C signals in DEPT NMR experiments

Type of ^{13}C spectrum	CH_3	CH_2	CH	C
Broadband-decoupled ^{13}C	+	+	+	+
DEPT(45)	+	+	+	0 ^b
DEPT(90)	0	0	+	0
DEPT(135)	+	- ^c	+	0

a. + = positive signal. b. 0 = no signal. c. - = negative signal.

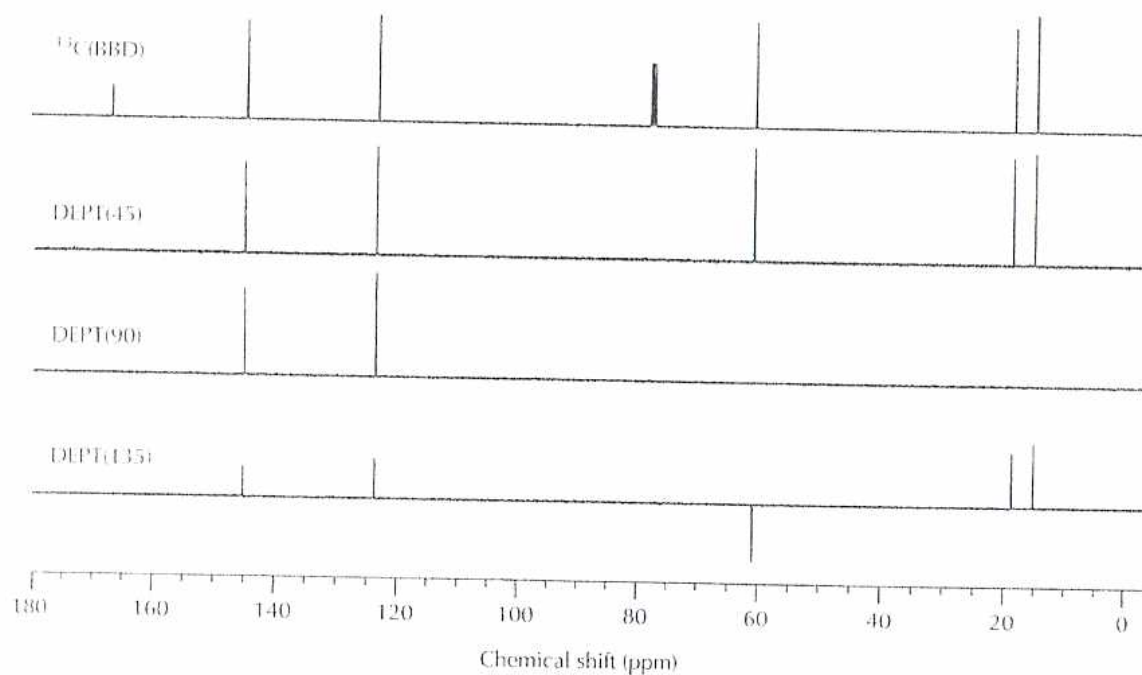
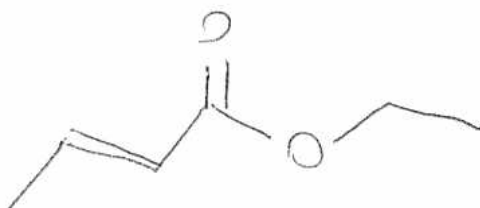
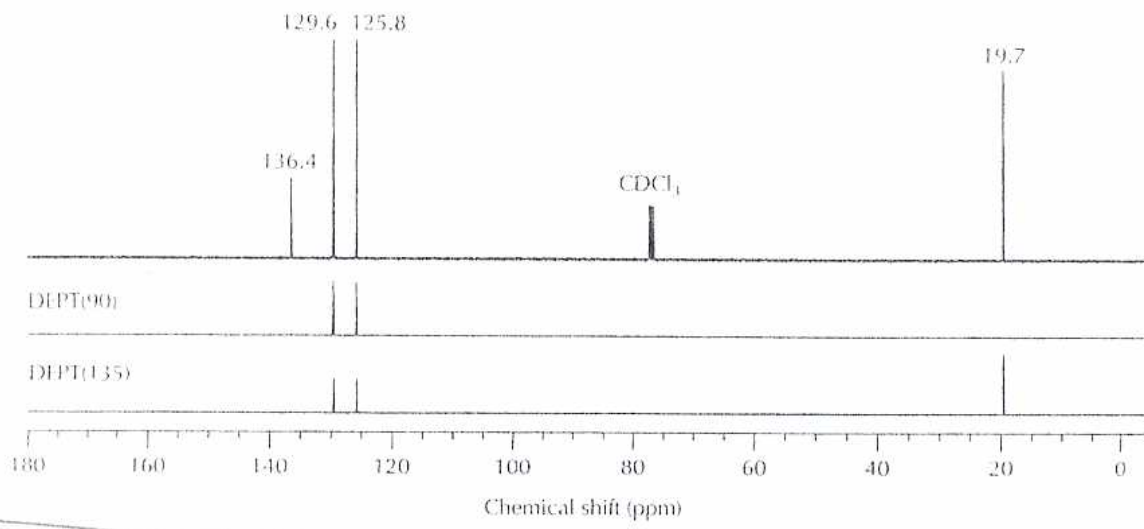
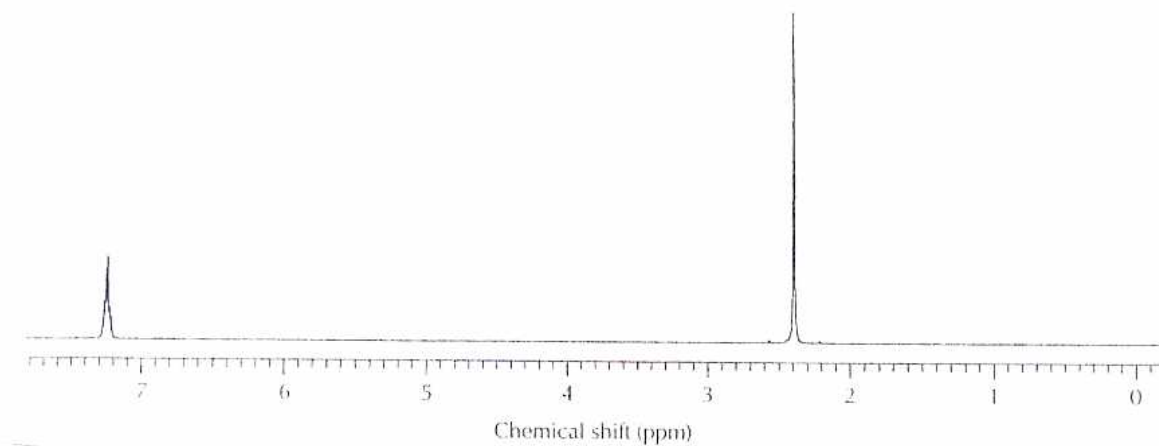
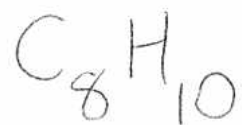


FIGURE 19.42

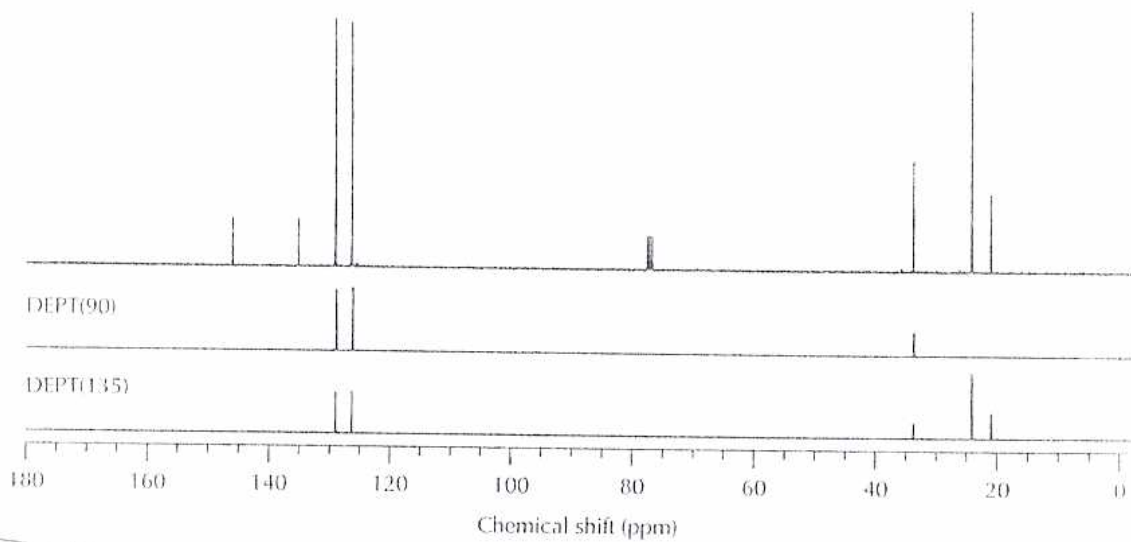
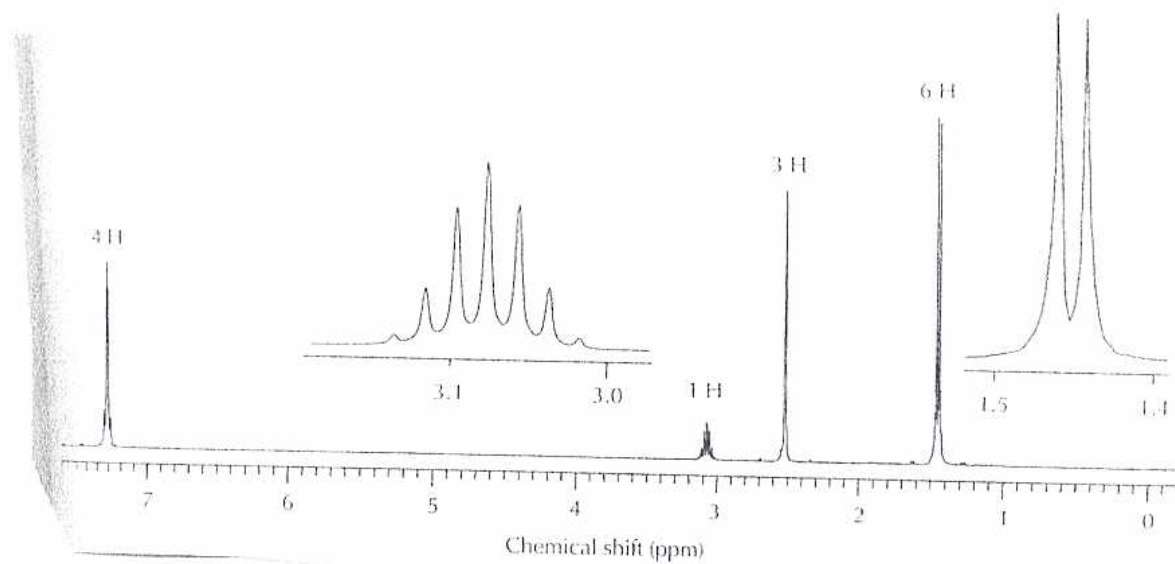
90-MHz DEPT spectra of ethyl *trans*-2-butenoate in CDCl_3 . The broadband-decoupled 90-MHz ^{13}C NMR spectrum is shown at the top.



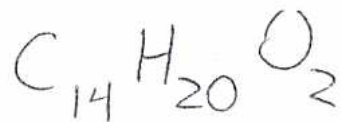
Problem 1



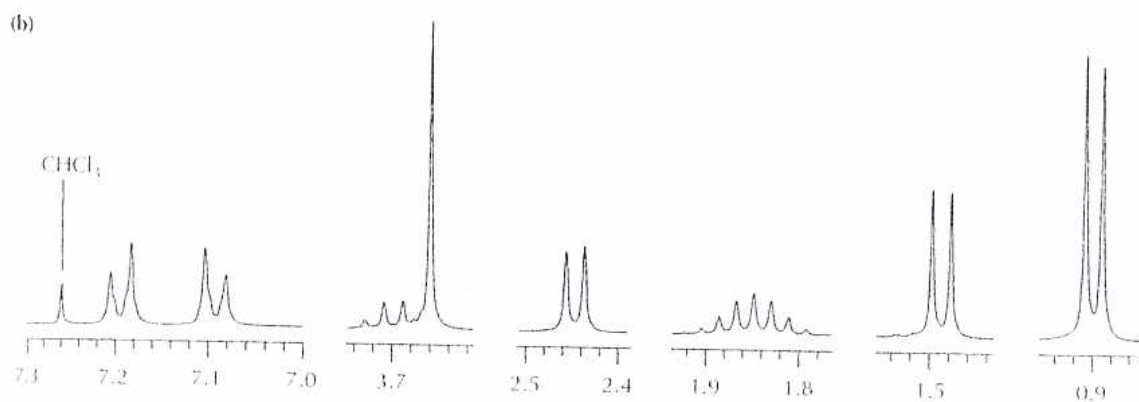
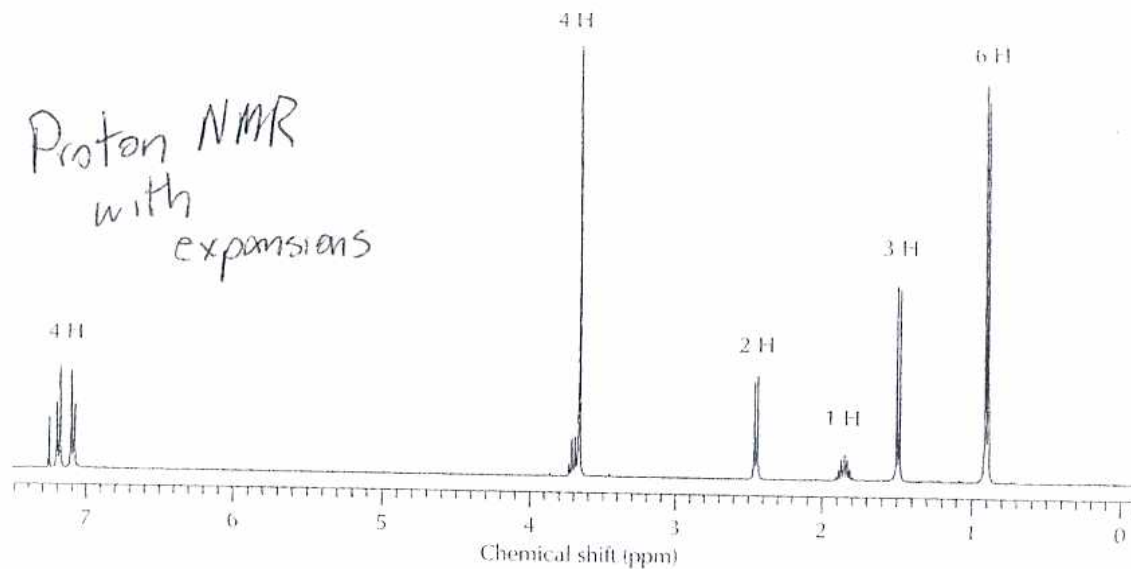
Problem 2: $C_{10}H_{14}$



Problem 3



Proton NMR
with
expansions



DEPT

