

SL & HL Spectroscopic identification of organic compounds:

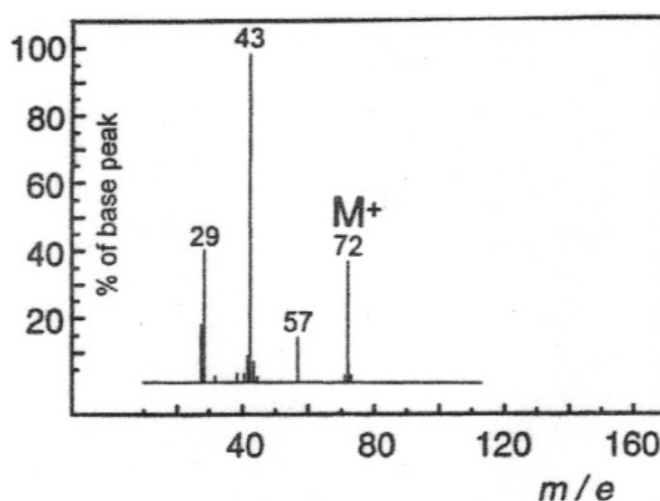
Question 3

Identify **compound C** from the data (a – d) given and explain how you arrived at your answer

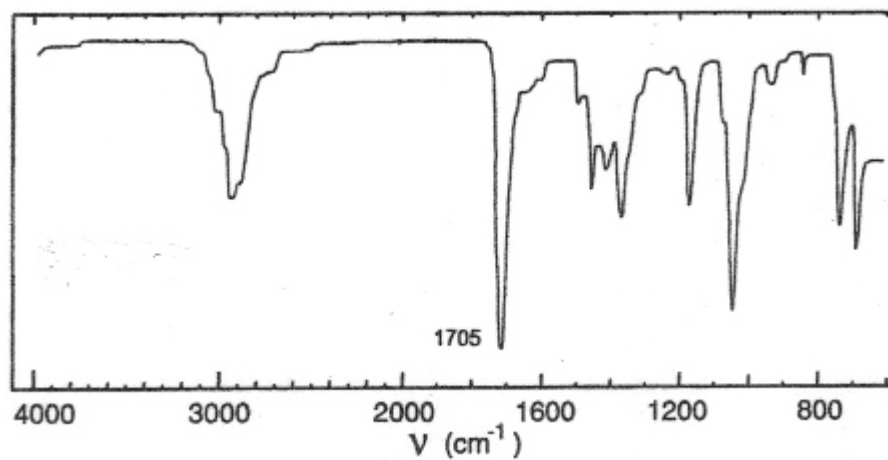
a) Elemental analysis of **compound C**

Element	Percentage by mass
Carbon	66.61
Hydrogen	11.20
Oxygen	22.19

b) Mass spectrum of **compound C**



c) Infrared spectrum of **compound C**



d) Information about **compound C** from ^1H NMR spectrum

Position of signal / δ ppm	Integration trace
0.9	3
2.0	3
2.3	2