

HL Spectroscopic identification of organic compounds:

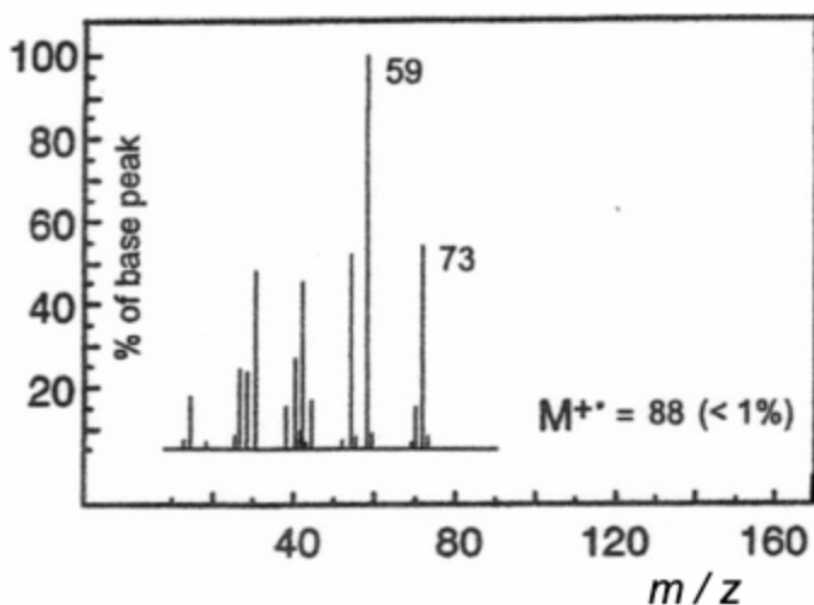
Question 13

Identify **Compound M** from the data (a – d) given and explain how you arrived at your answer.

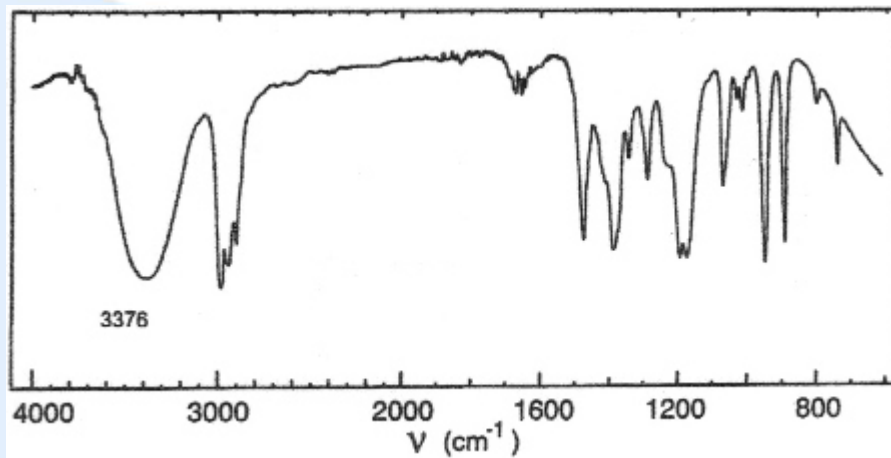
(a) Elemental analysis of Compound M

Element	Percentage by mass
Carbon	68.11
Hydrogen	13.74
Oxygen	18.15

(b) Mass spectrum of Compound M



(c) Infrared spectrum of **Compound M**



(d) ^1H NMR spectrum of **Compound M**

