

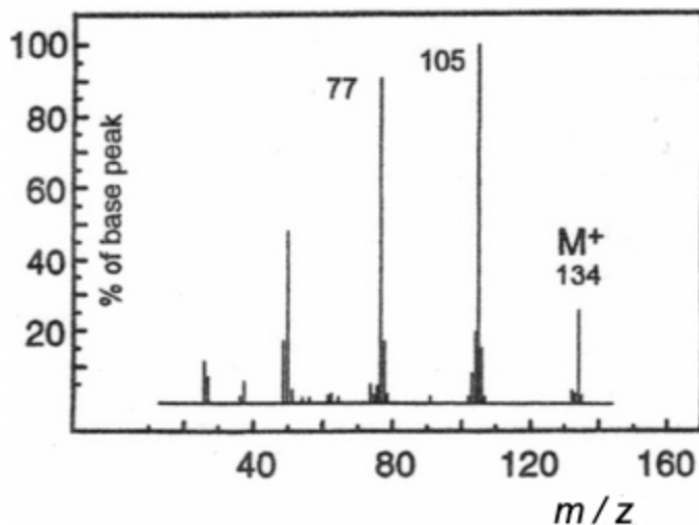
HL Spectroscopic identification of organic compounds: Question 12

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

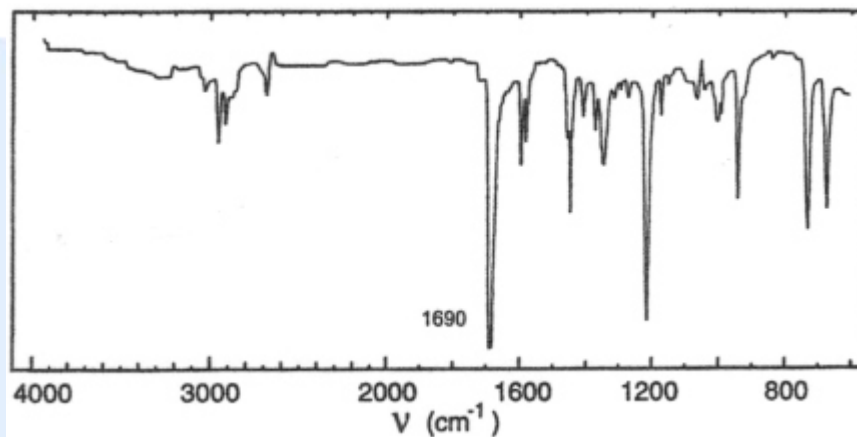
(a) Elemental analysis of Compound L

| Element | Percentage by mass |
|----------|--------------------|
| Carbon | 80.56 |
| Hydrogen | 7.52 |
| Oxygen | 11.92 |

(b) Mass spectrum of Compound L



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



(d) ¹H NMR spectrum of **Compound L**

