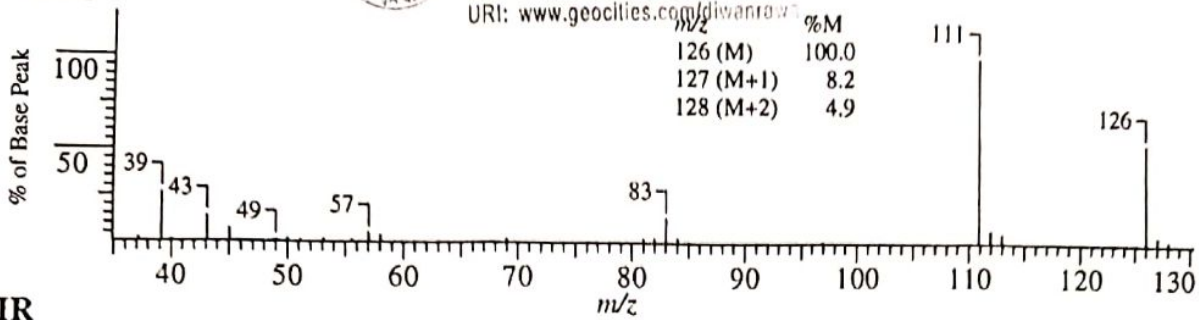


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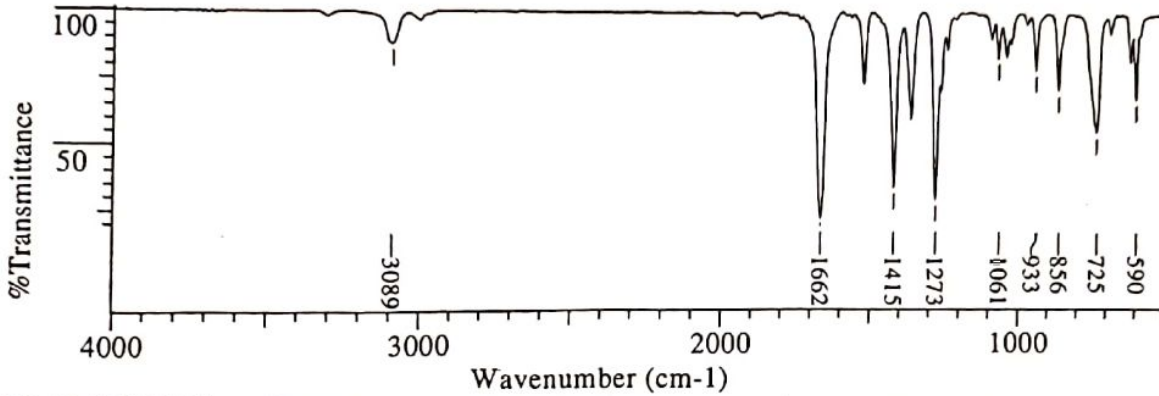


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 Problem 8.5

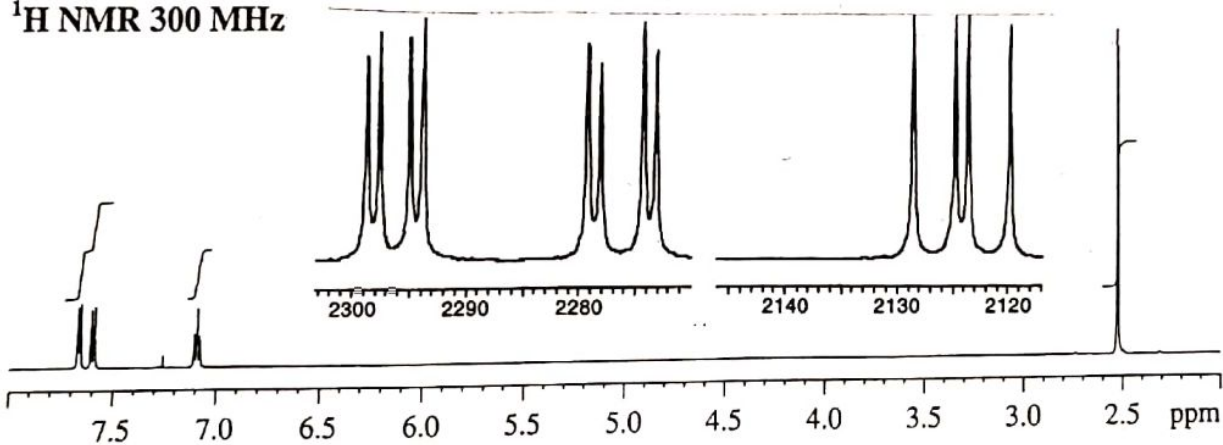
MASS



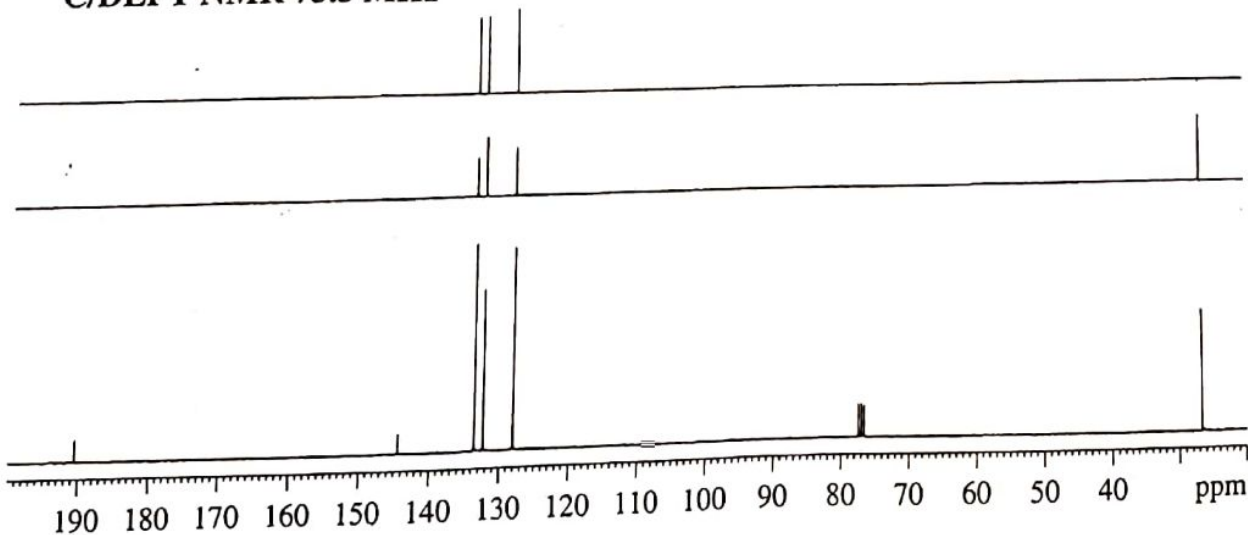
IR



<sup>1</sup>H NMR 300 MHz

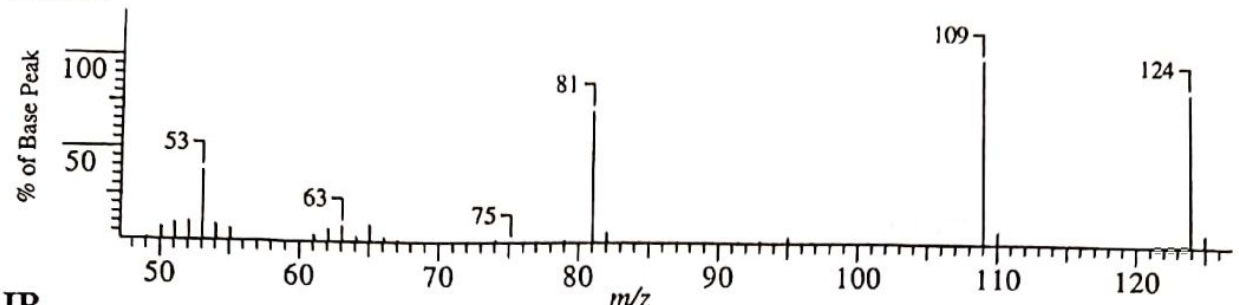


<sup>13</sup>C/DEPT NMR 75.5 MHz

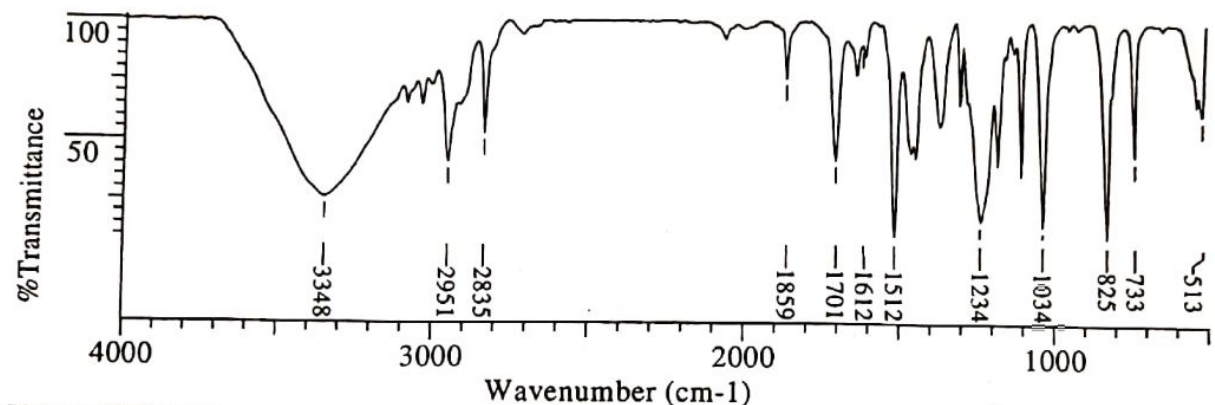




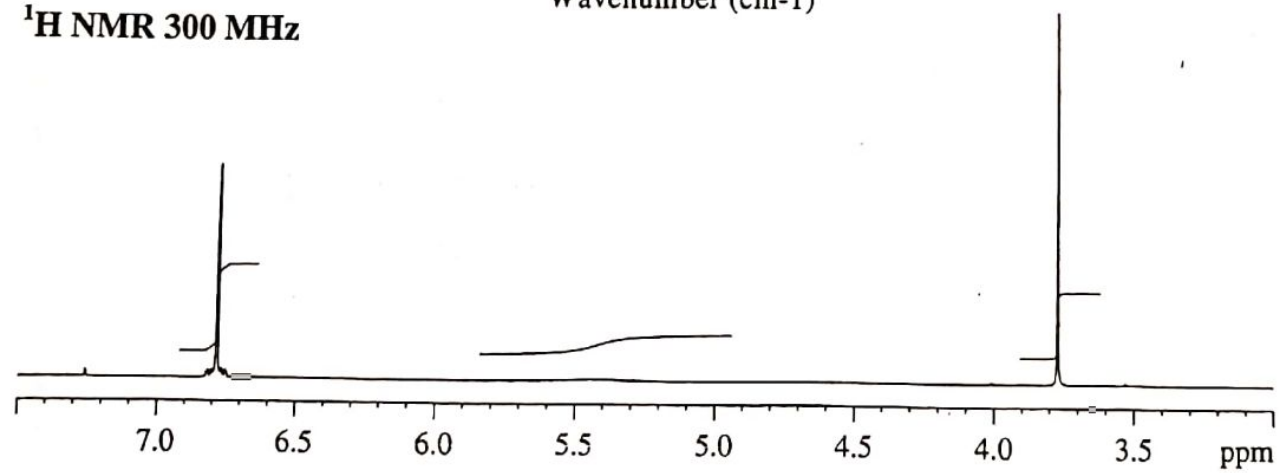
MASS



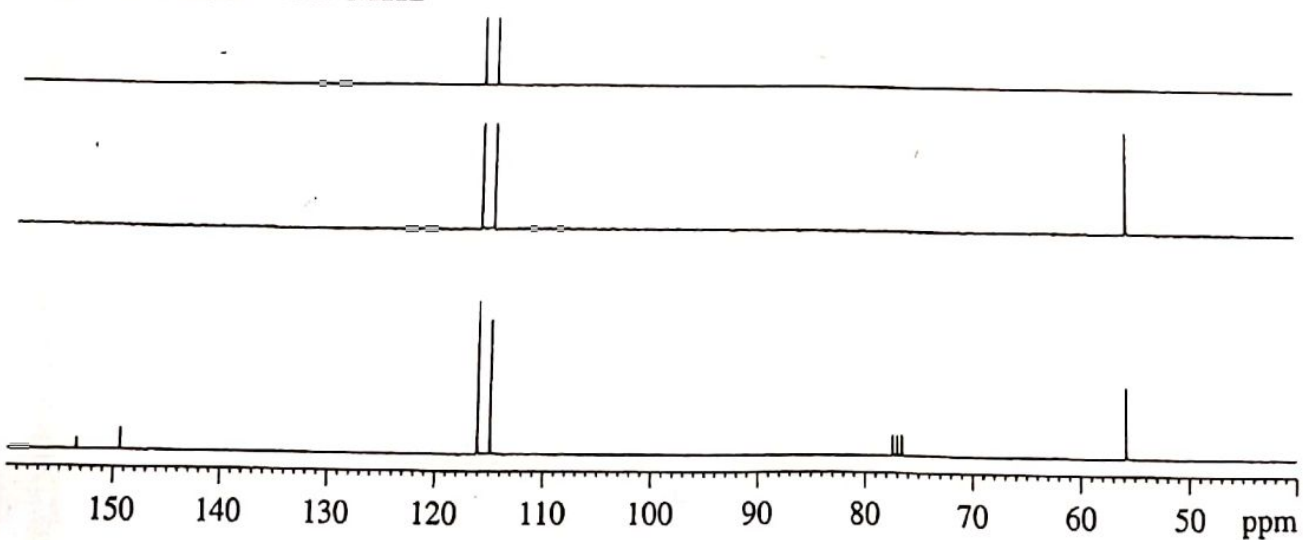
IR



<sup>1</sup>H NMR 300 MHz

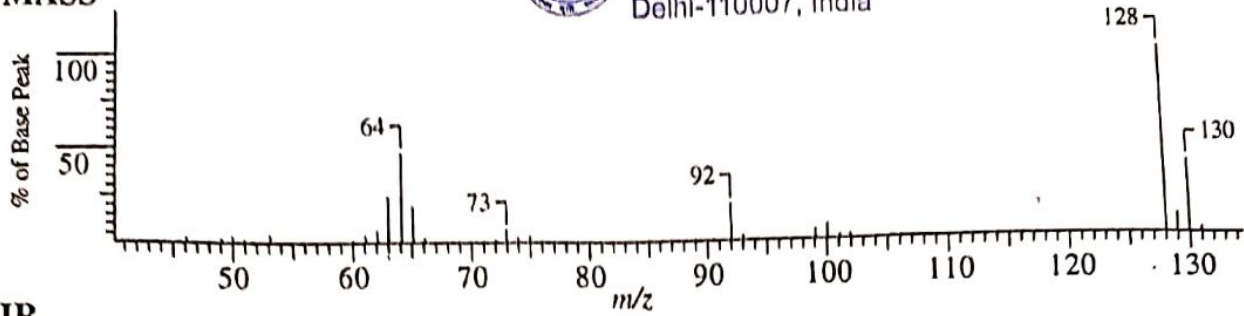


<sup>13</sup>C/DEPT NMR 75.5 MHz

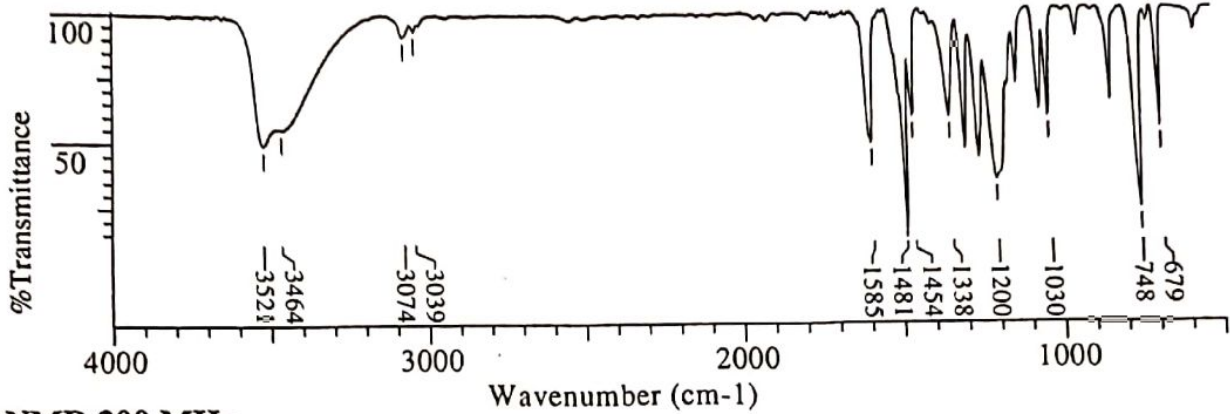




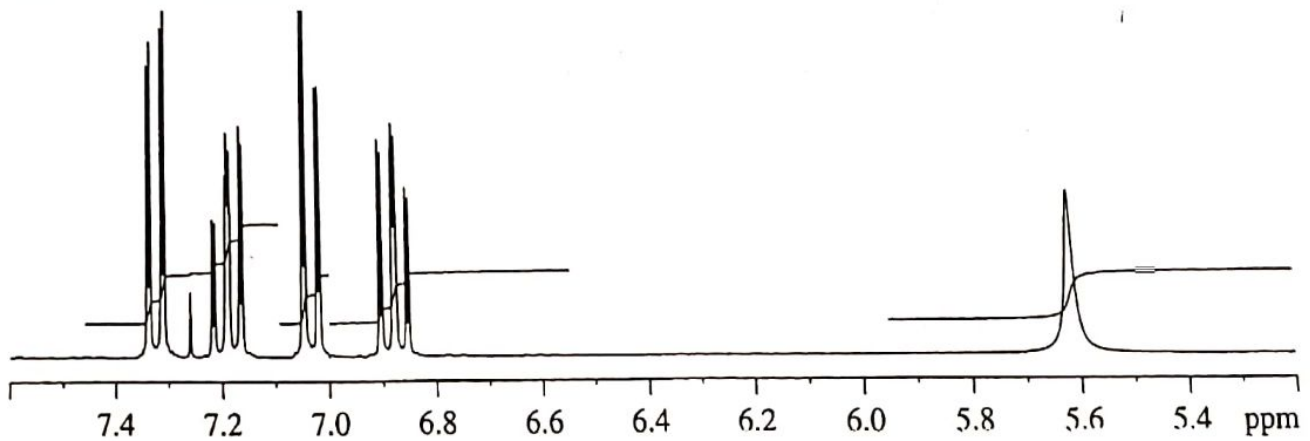
**MASS**



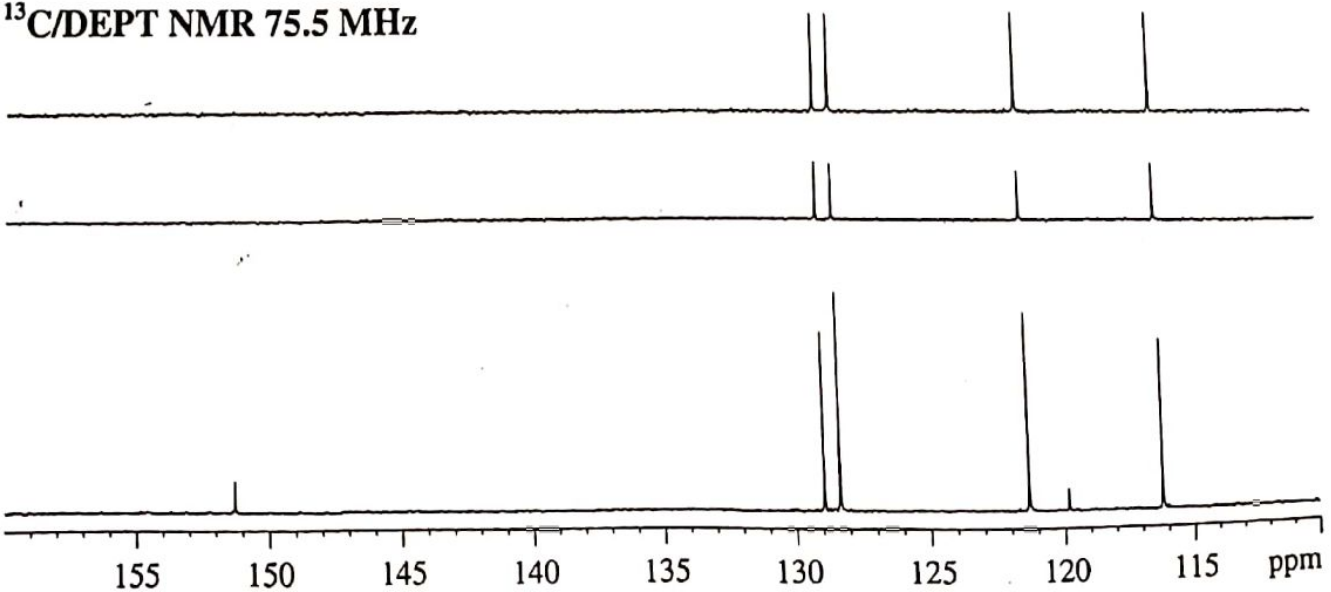
**IR**



**<sup>1</sup>H NMR 300 MHz**

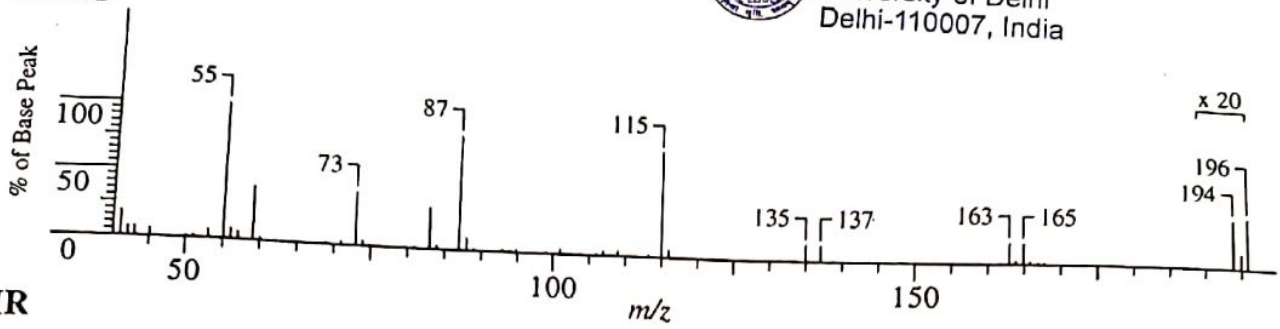


**<sup>13</sup>C/DEPT NMR 75.5 MHz**

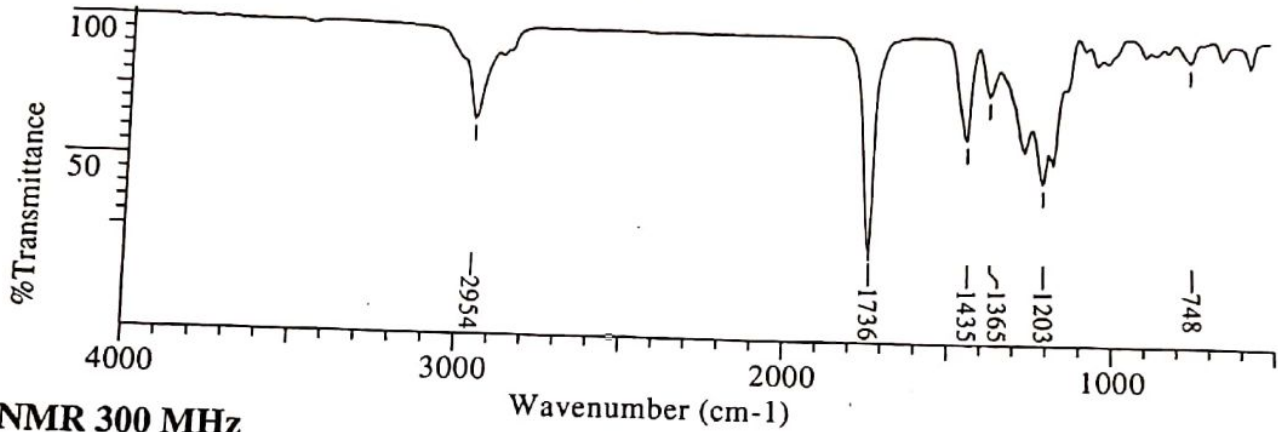




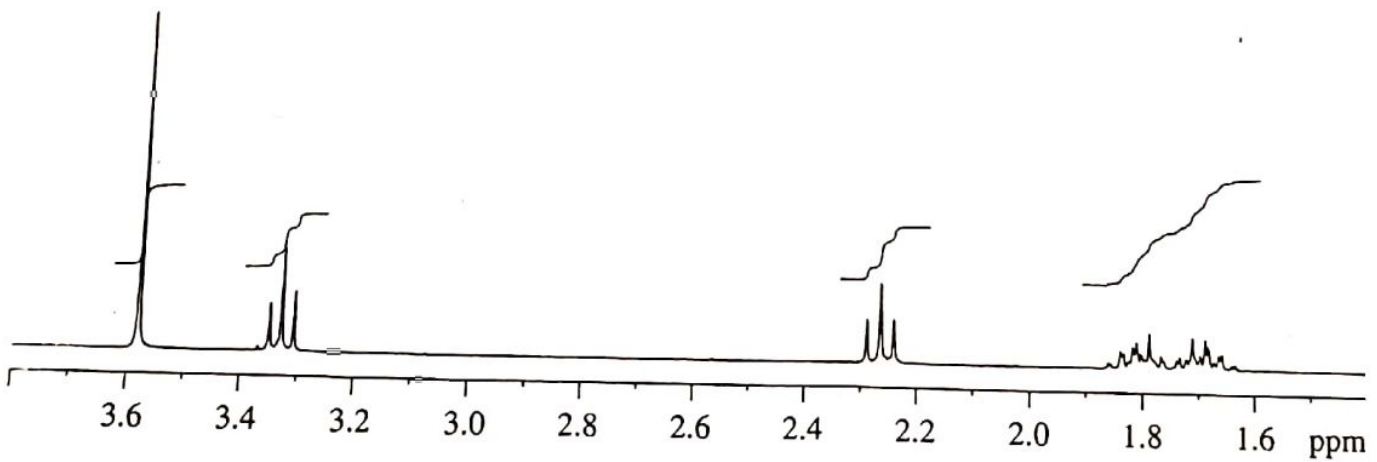
**MASS**



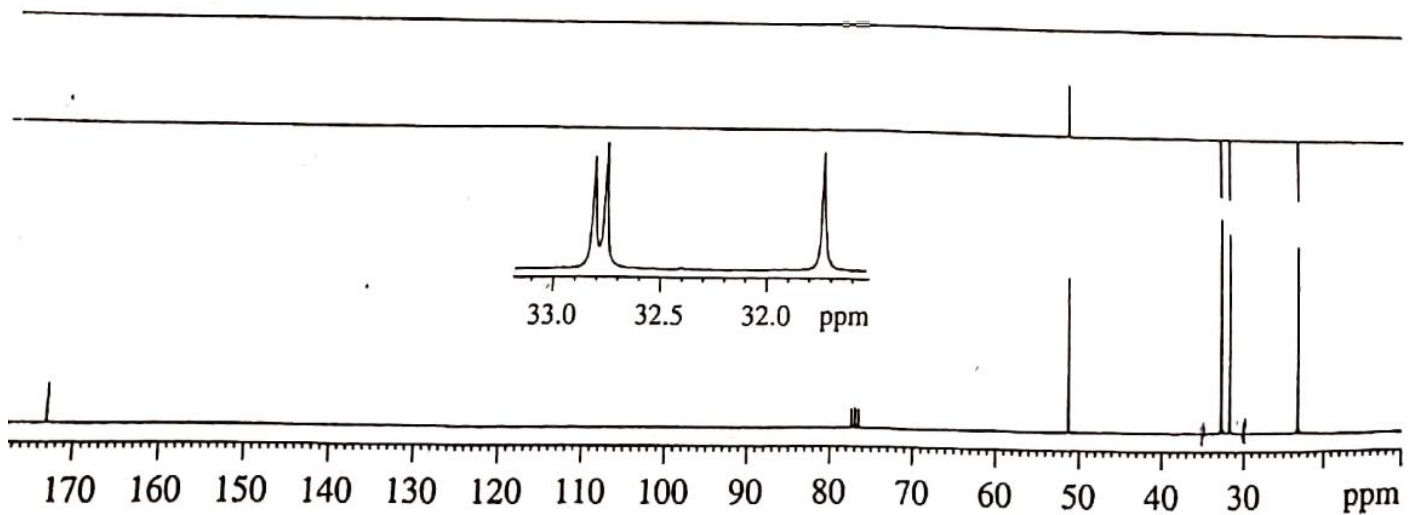
**IR**



**$^1\text{H}$  NMR 300 MHz**



**$^{13}\text{C}/\text{DEPT}$  NMR 75.5 MHz**



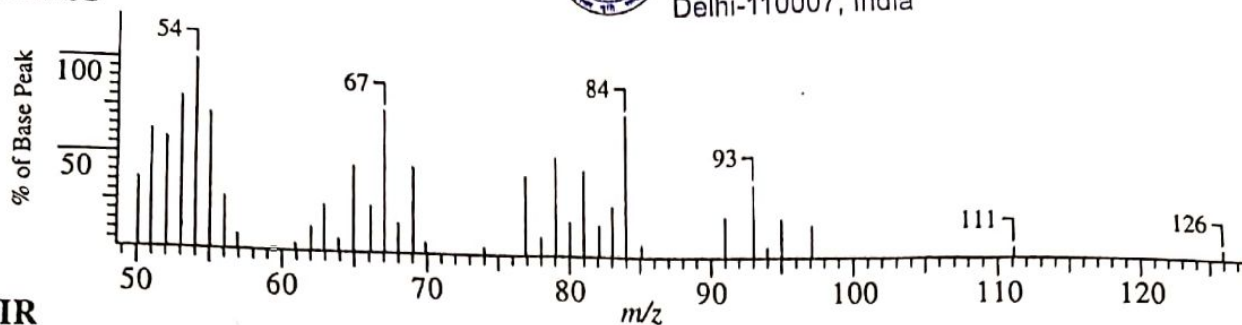
Problem 8.10



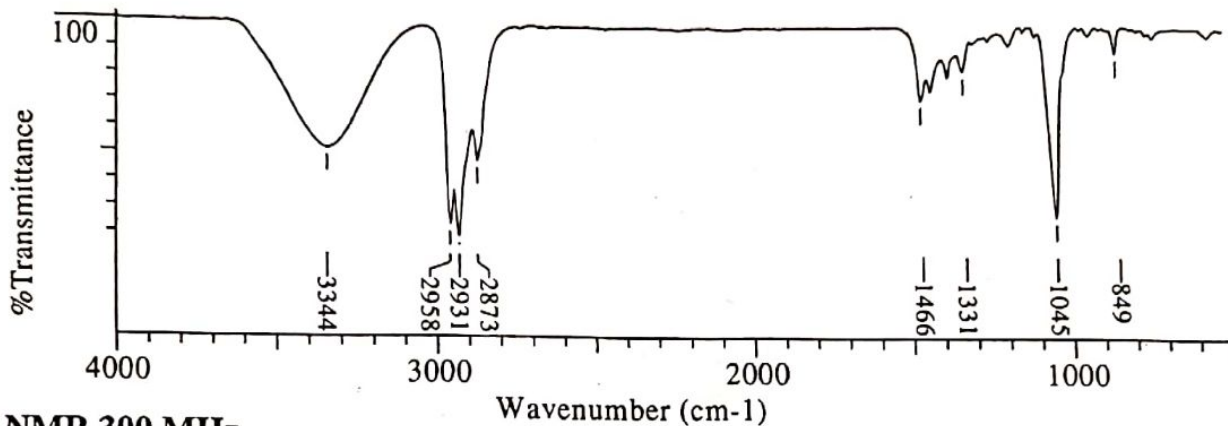
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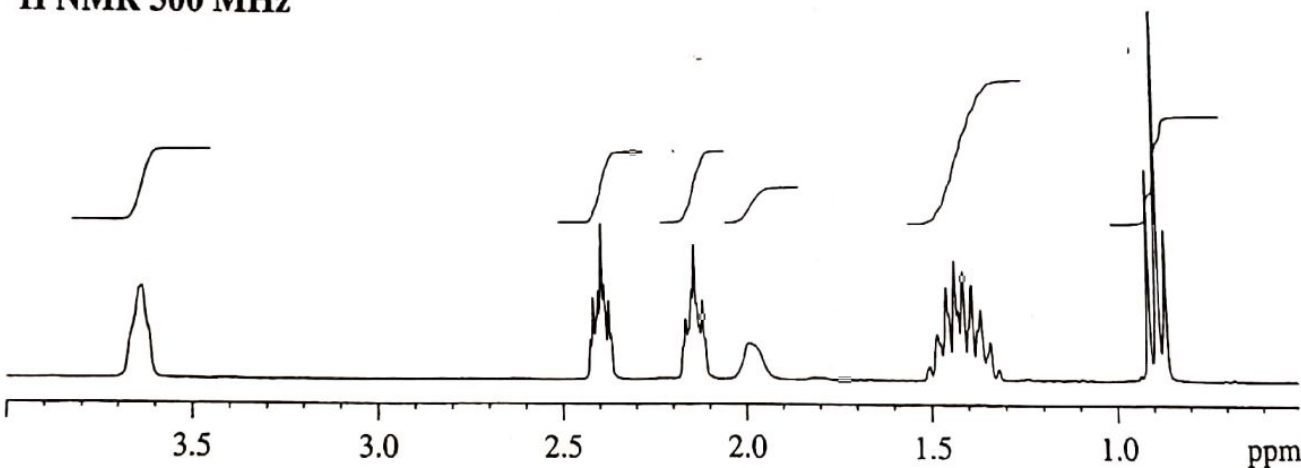
MASS



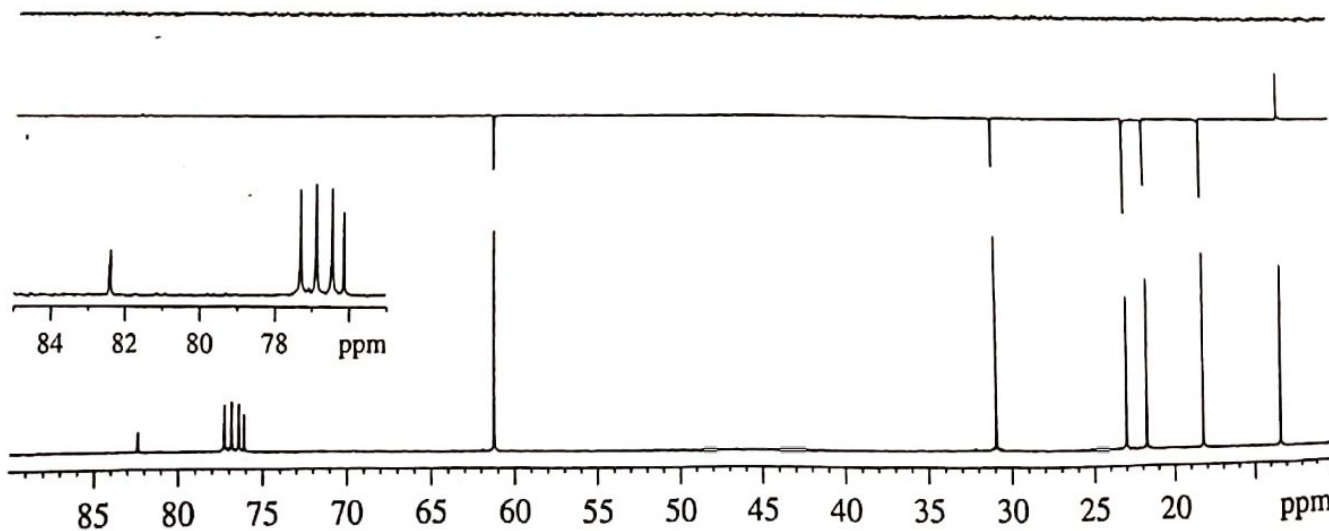
IR



<sup>1</sup>H NMR 300 MHz



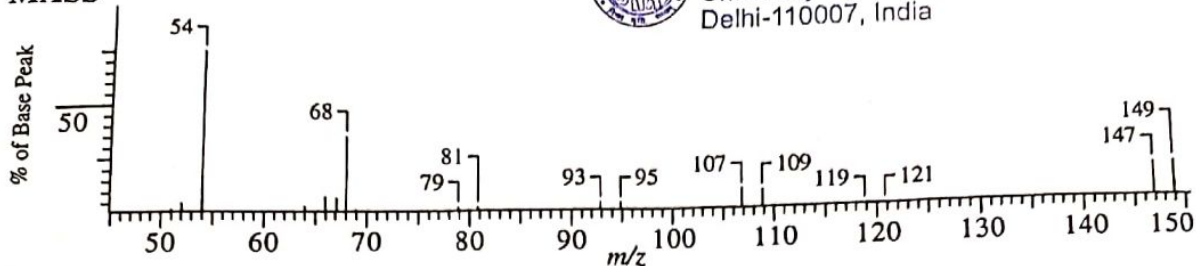
<sup>13</sup>C/DEPT NMR 75.5 MHz



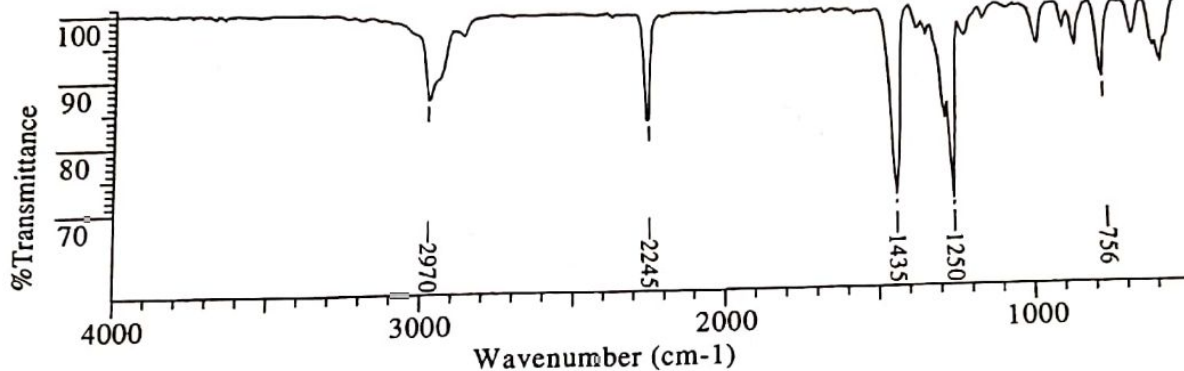


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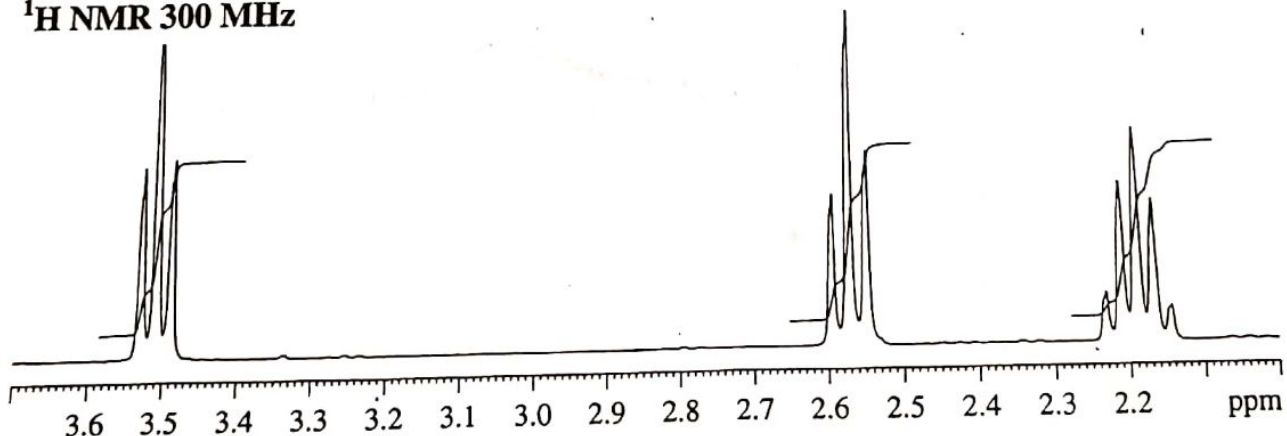
**MASS**



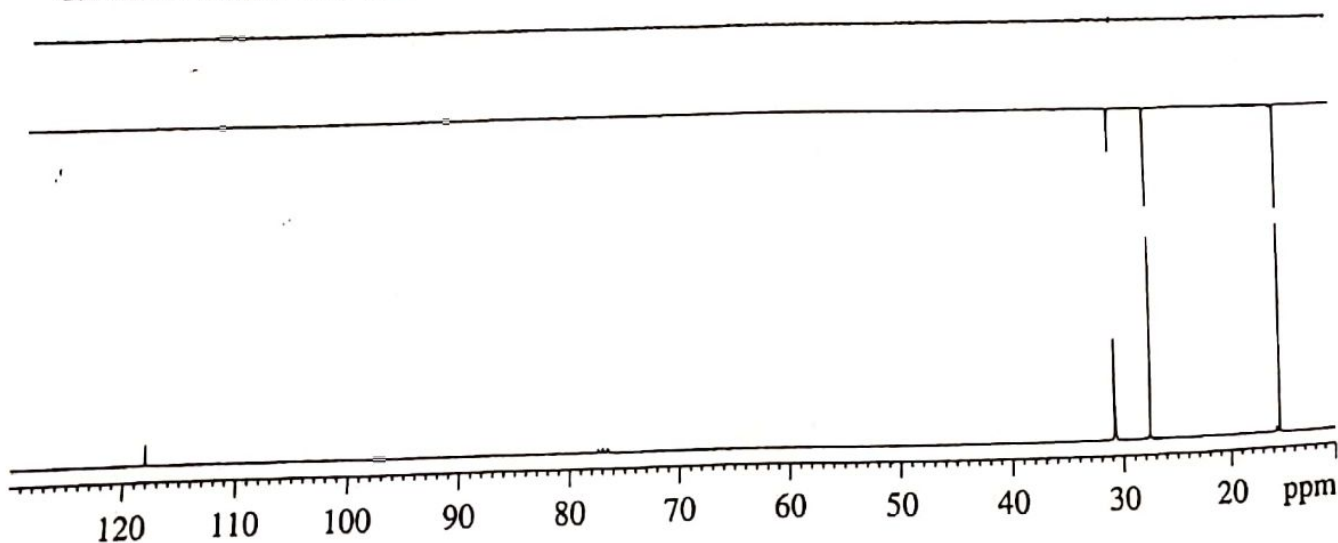
**IR**



**<sup>1</sup>H NMR 300 MHz**



**<sup>13</sup>C/DEPT NMR 75.5 MHz**

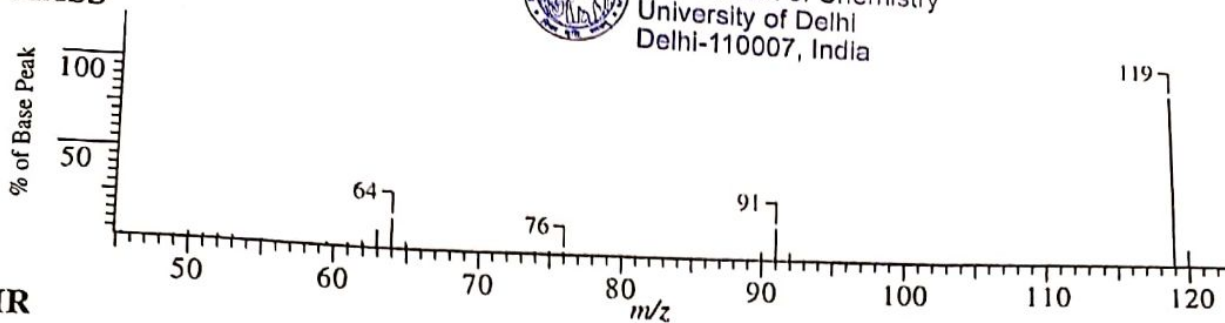




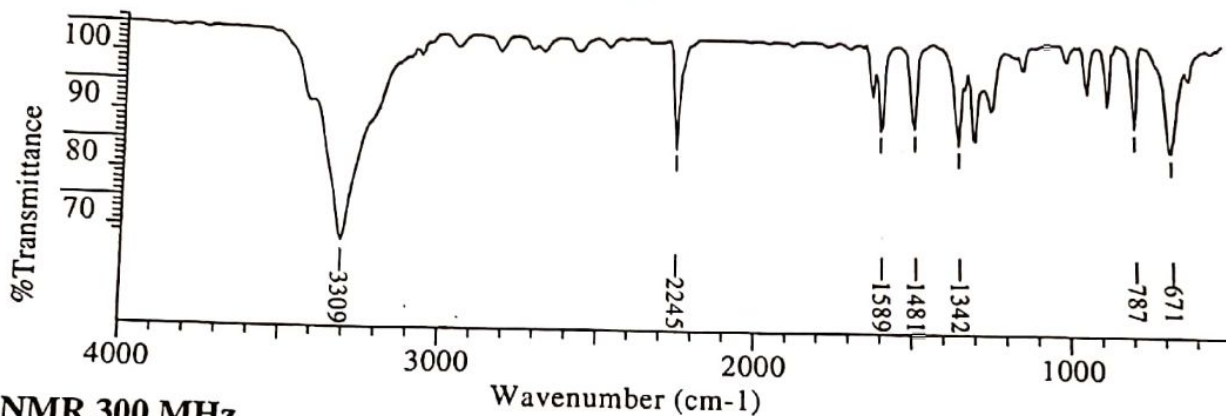
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Problem 8.17

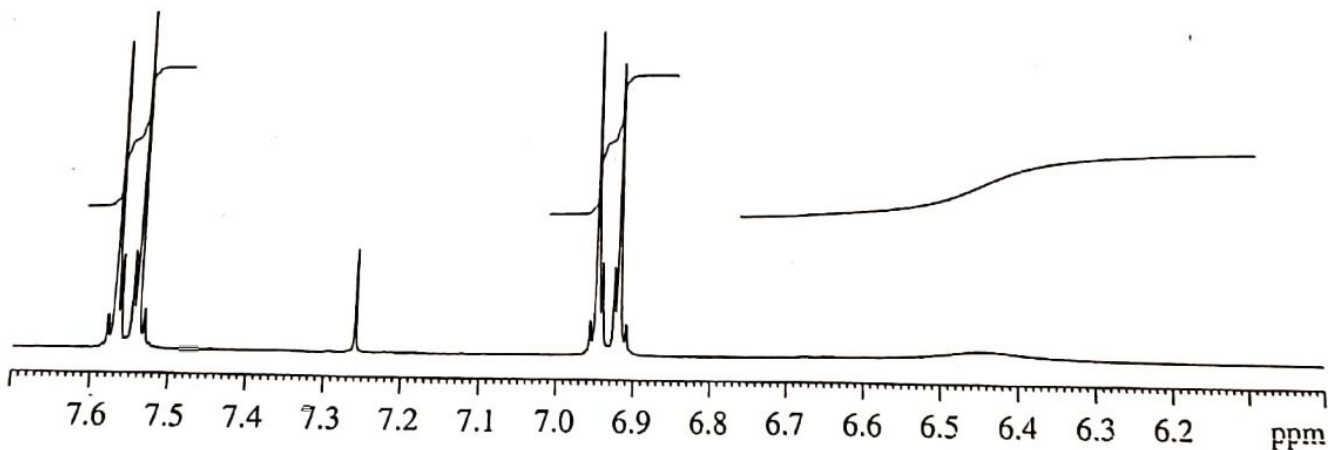
MASS



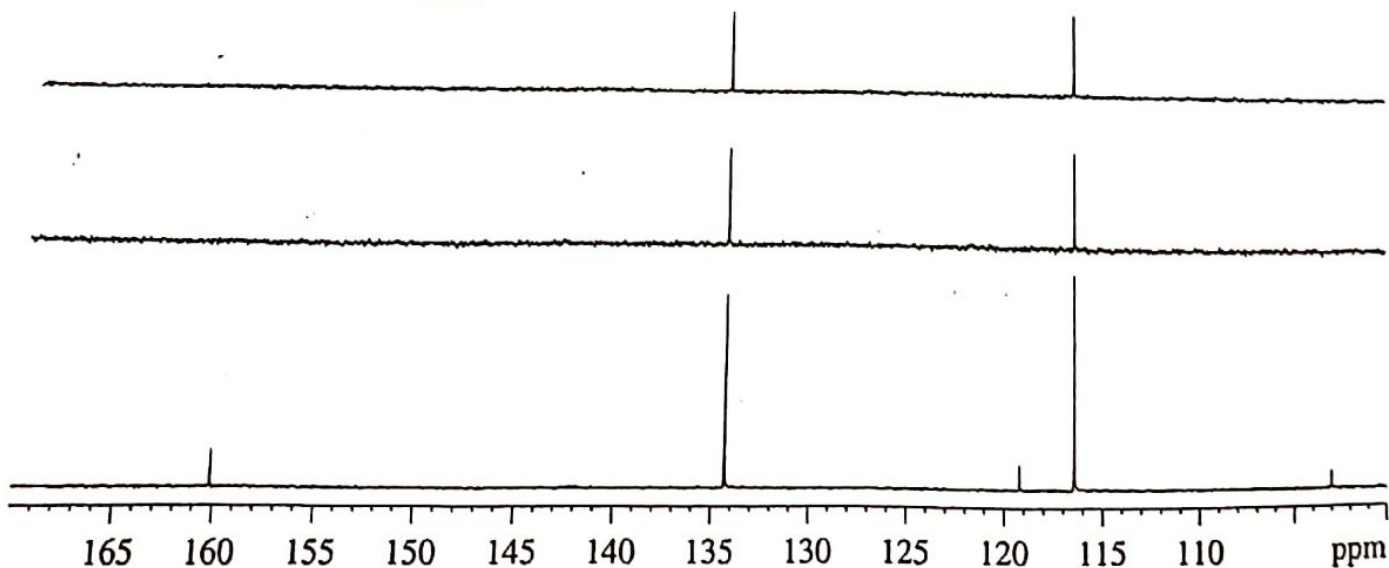
IR



<sup>1</sup>H NMR 300 MHz



<sup>13</sup>C/DEPT NMR 75.5 MHz



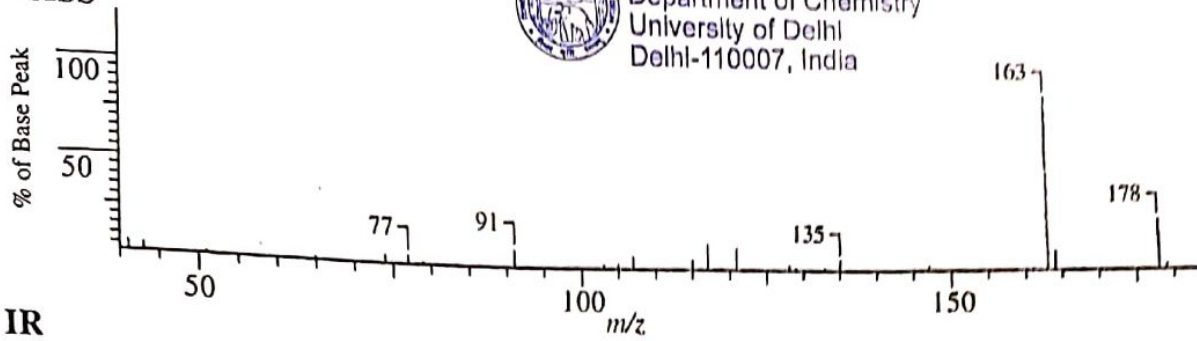
Problem 8.18



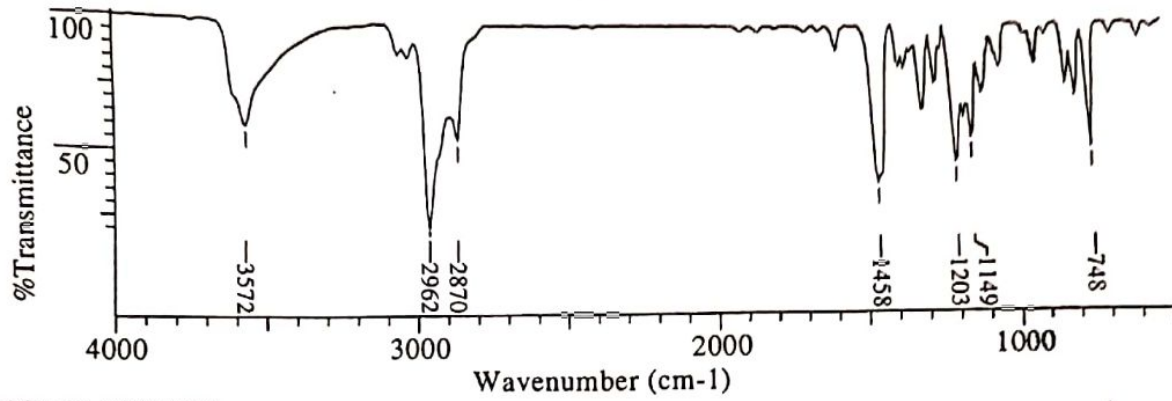
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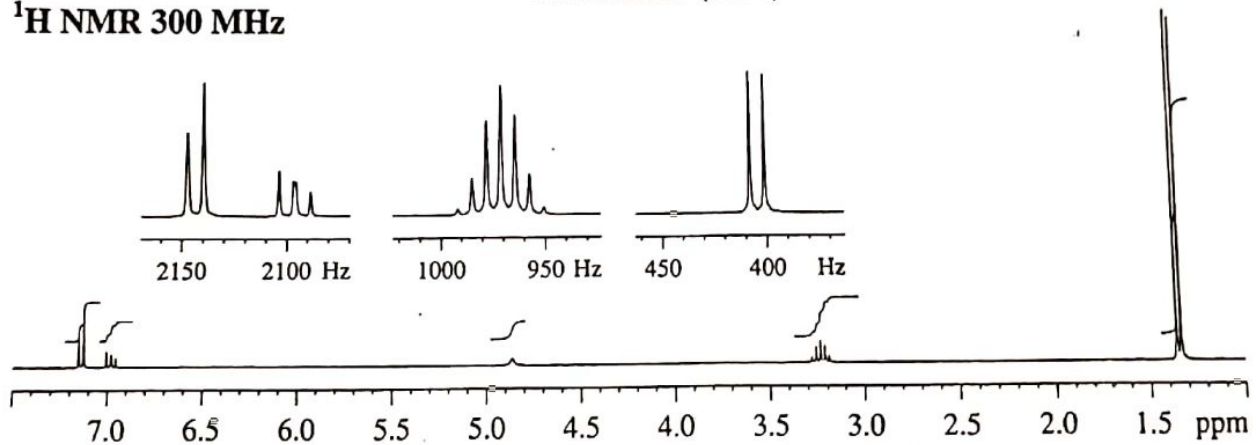
MASS



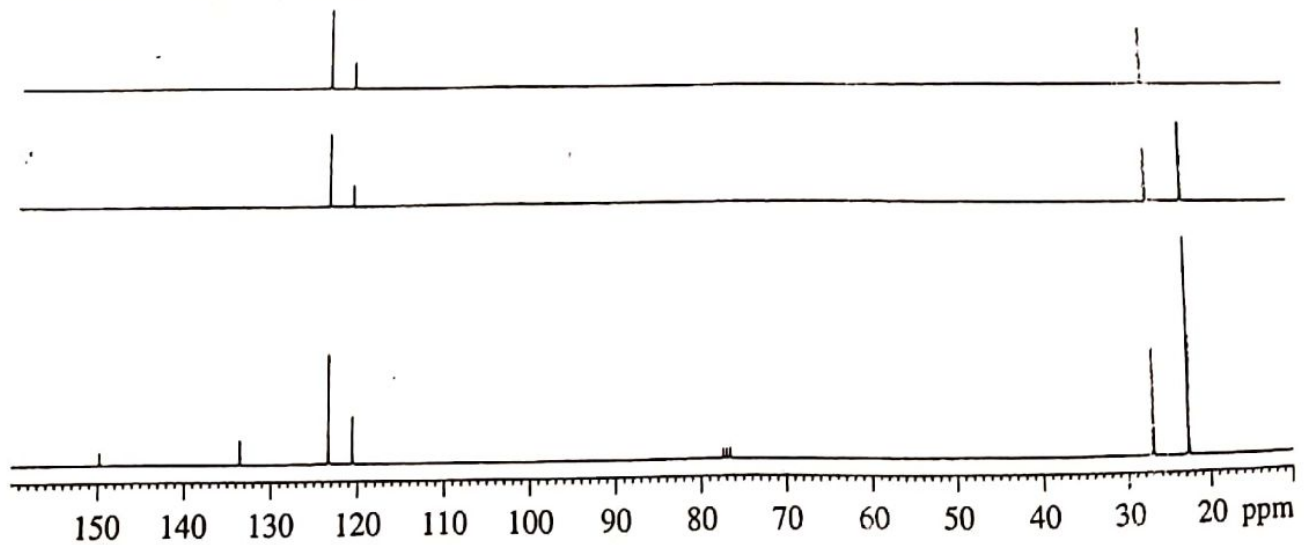
IR



<sup>1</sup>H NMR 300 MHz



<sup>13</sup>C/DEPT NMR 75.5 MHz



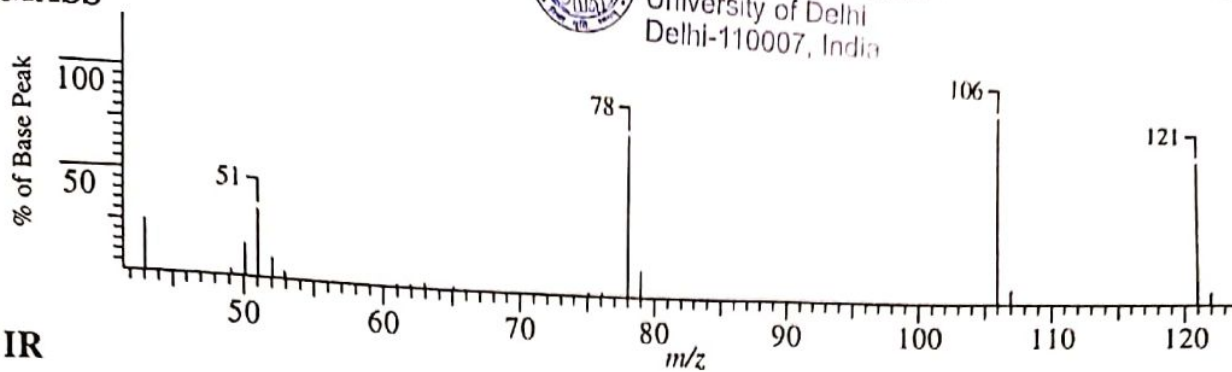




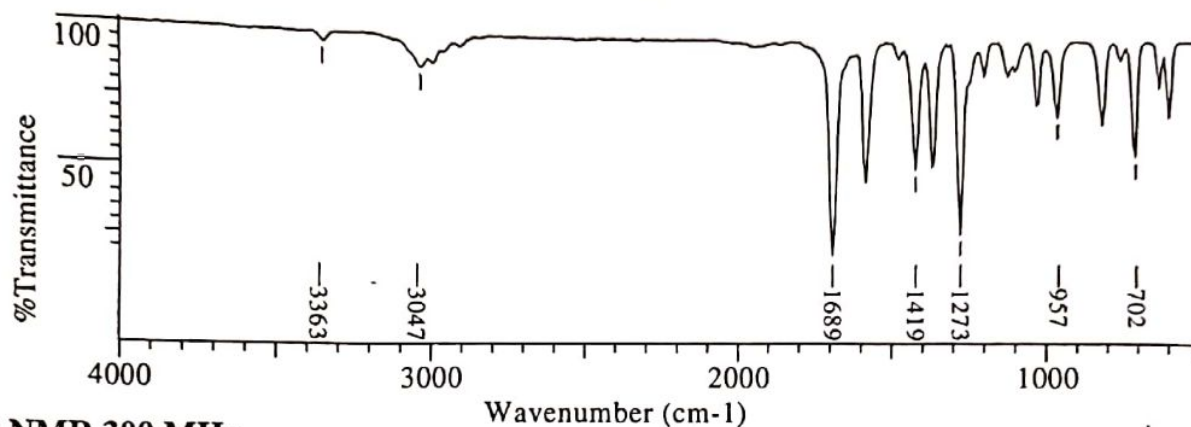
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Problem 8.19

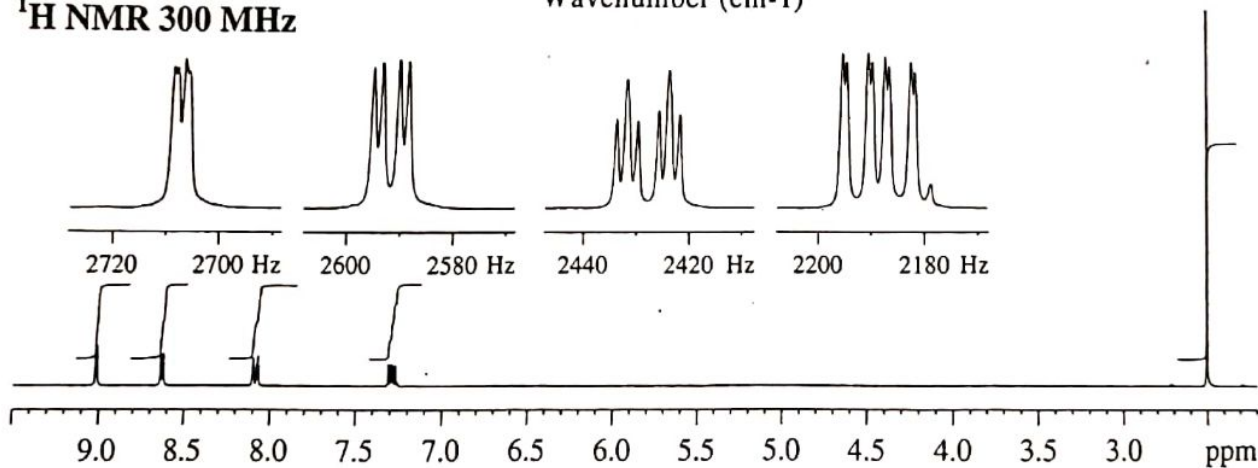
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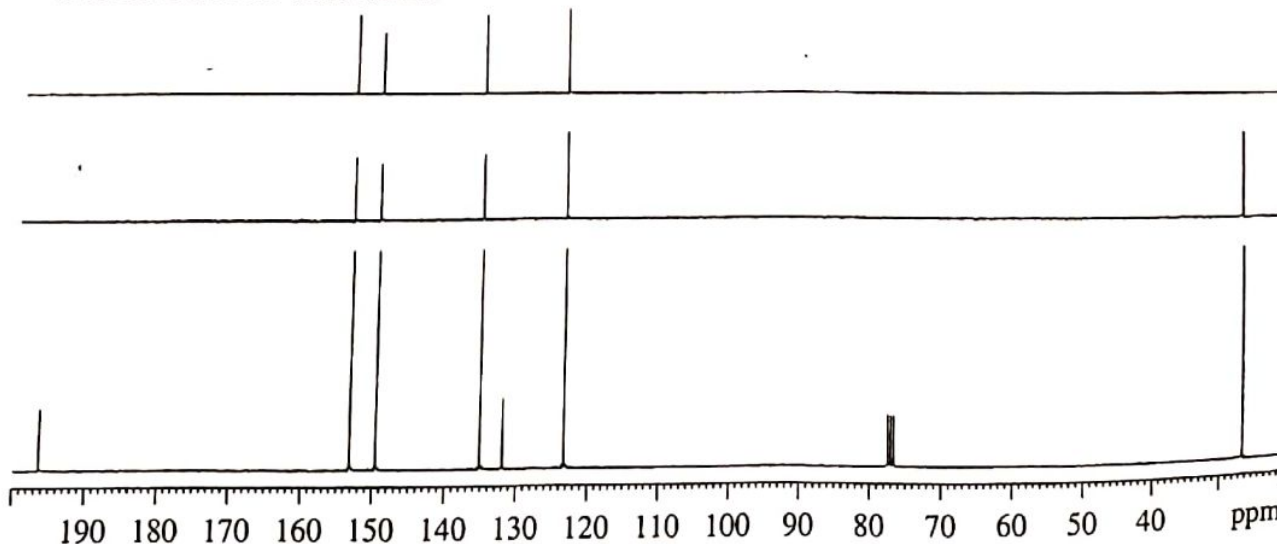
IR



<sup>1</sup>H NMR 300 MHz

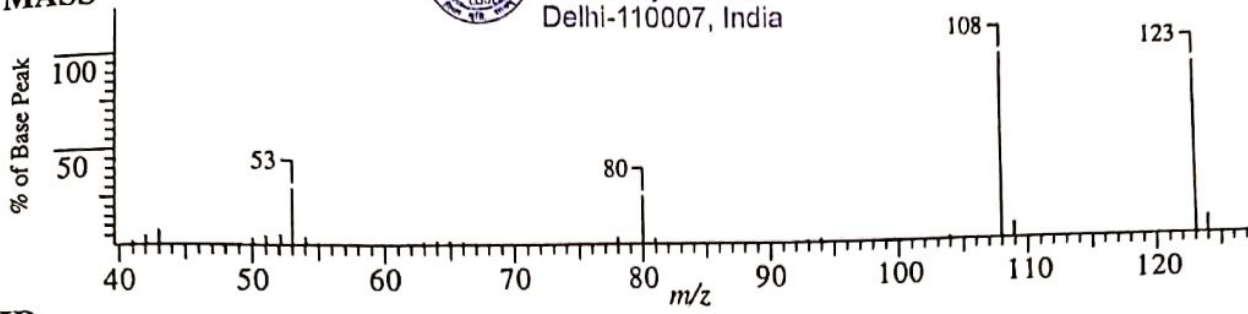


<sup>13</sup>C/DEPT NMR 75.5 MHz

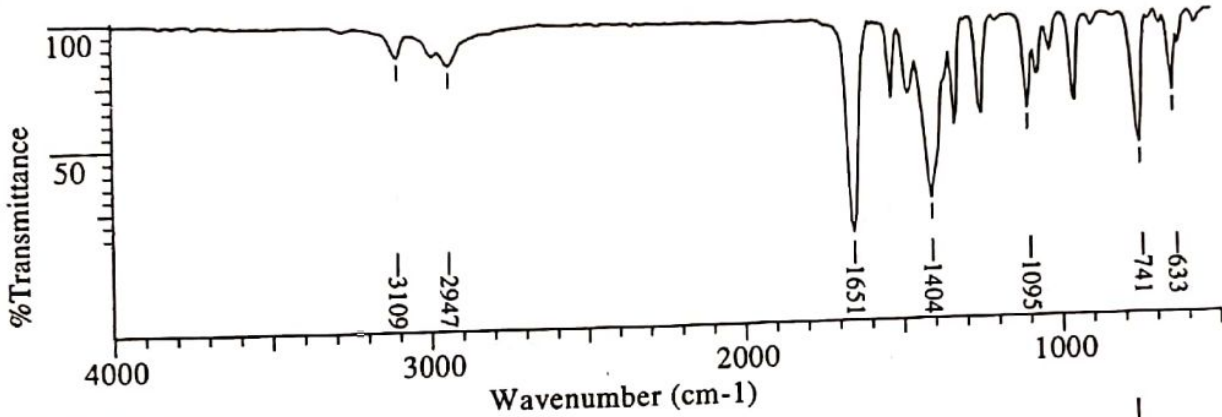




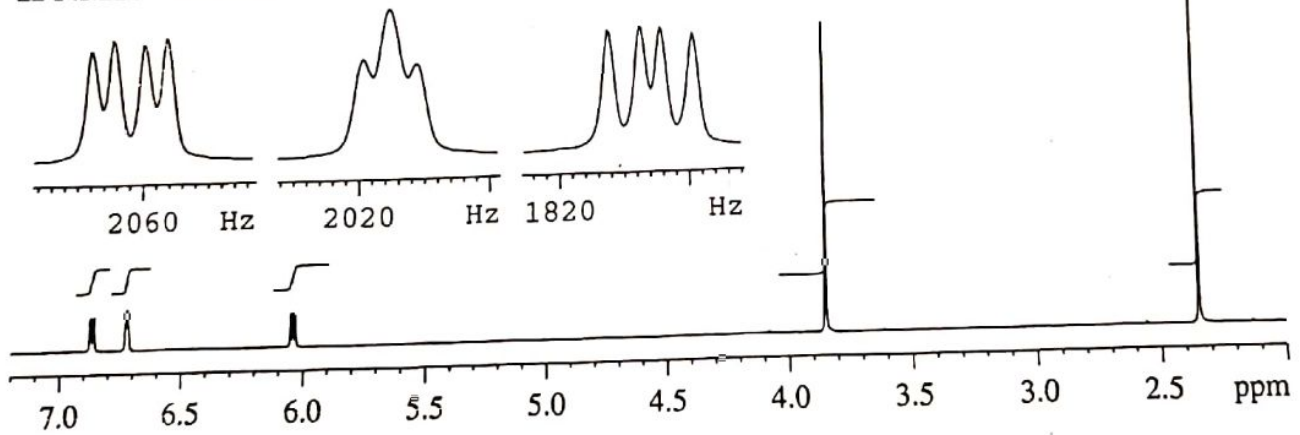
MASS



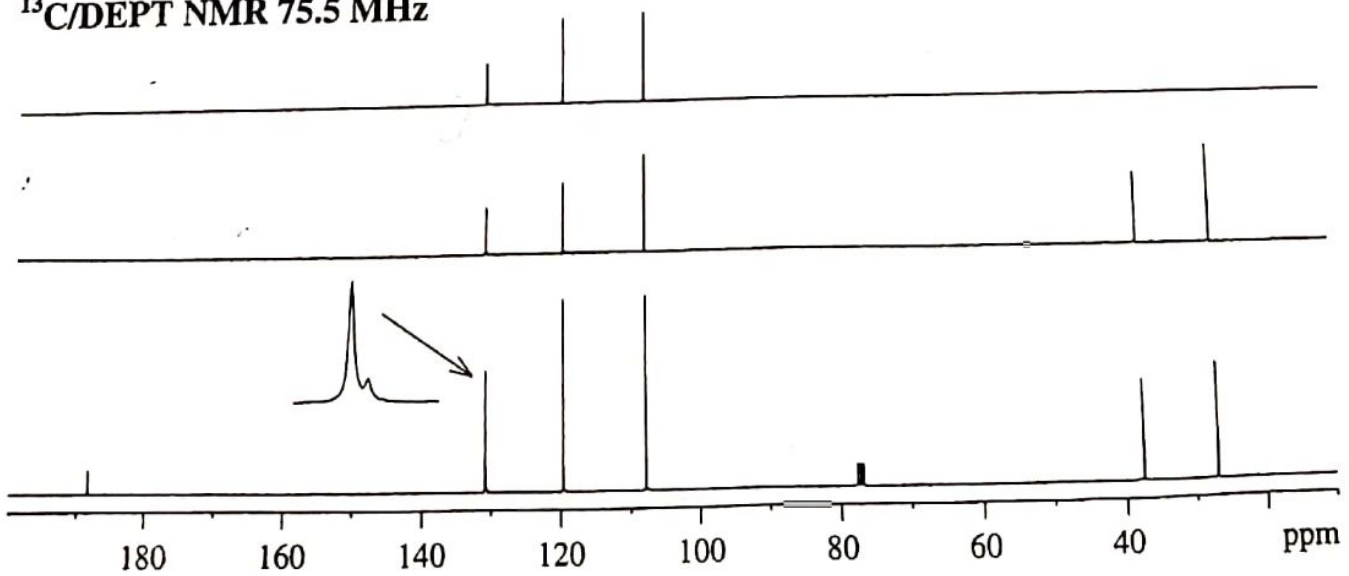
IR



<sup>1</sup>H NMR 300 MHz

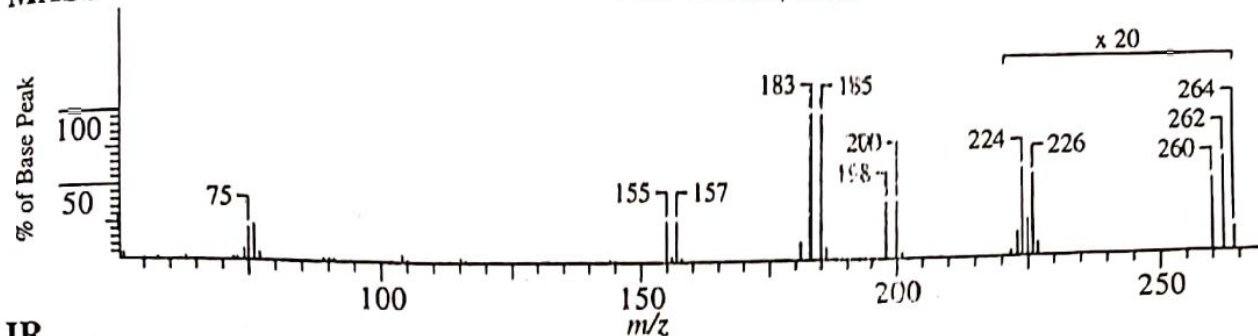


<sup>13</sup>C/DEPT NMR 75.5 MHz

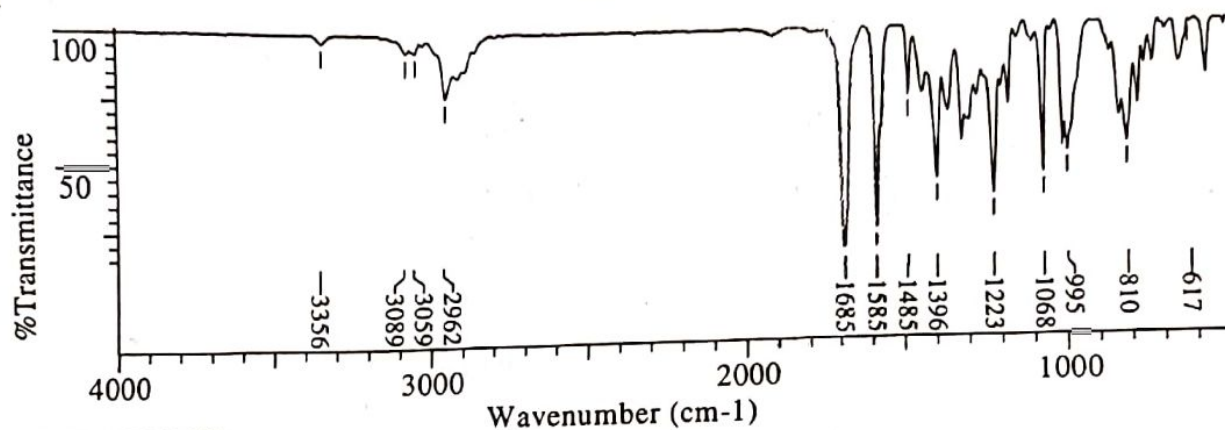
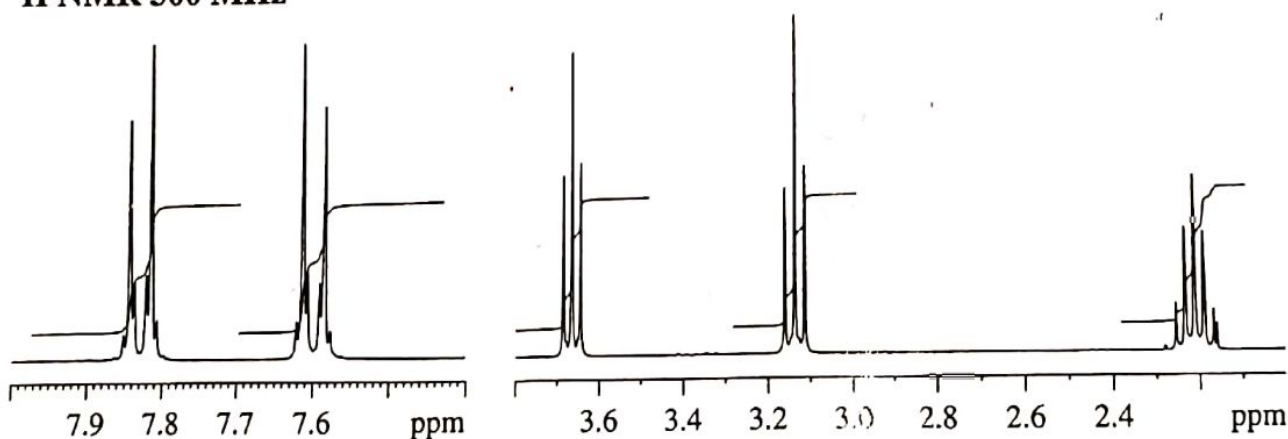




## MASS



## IR

 $^1\text{H}$  NMR 300 MHz $^{13}\text{C}/\text{DEPT}$  NMR 75.5 MHz