

Q.7

Identify the following compounds on the basis of the spectral data presented here. show your reasoning for the conclusion arrived at.

16

(i) Molecular weight: 108 amu

UV : λ_{\max} 253 nm

IR: 3401_(s), 3077_(s), 2899_(m), 1499_(b), 1456_(m), 690-710_(s) cm⁻¹

NMR: singlet δ =7.2(5H)

Singlet δ =4.5(2H)

Singlet δ =2.8(1H)

(ii) Molecular weight: 72 amu

UV : λ_{\max} 272 nm

IR: 2941-2857_(m), 1716_(s), 1460_(m) cm⁻¹

NMR: quartet δ =2.48(2H)

Singlet δ =2.22(3H)

triplet δ =1.07(3H)

.....