

CHEMISTRY HNOURS PRACTICAL EXAMINATION-2020

Gurudas College Centre

Paper: VIB (CHP-34a)

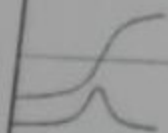
Full Marks-25

(Under 1+1+1 system)

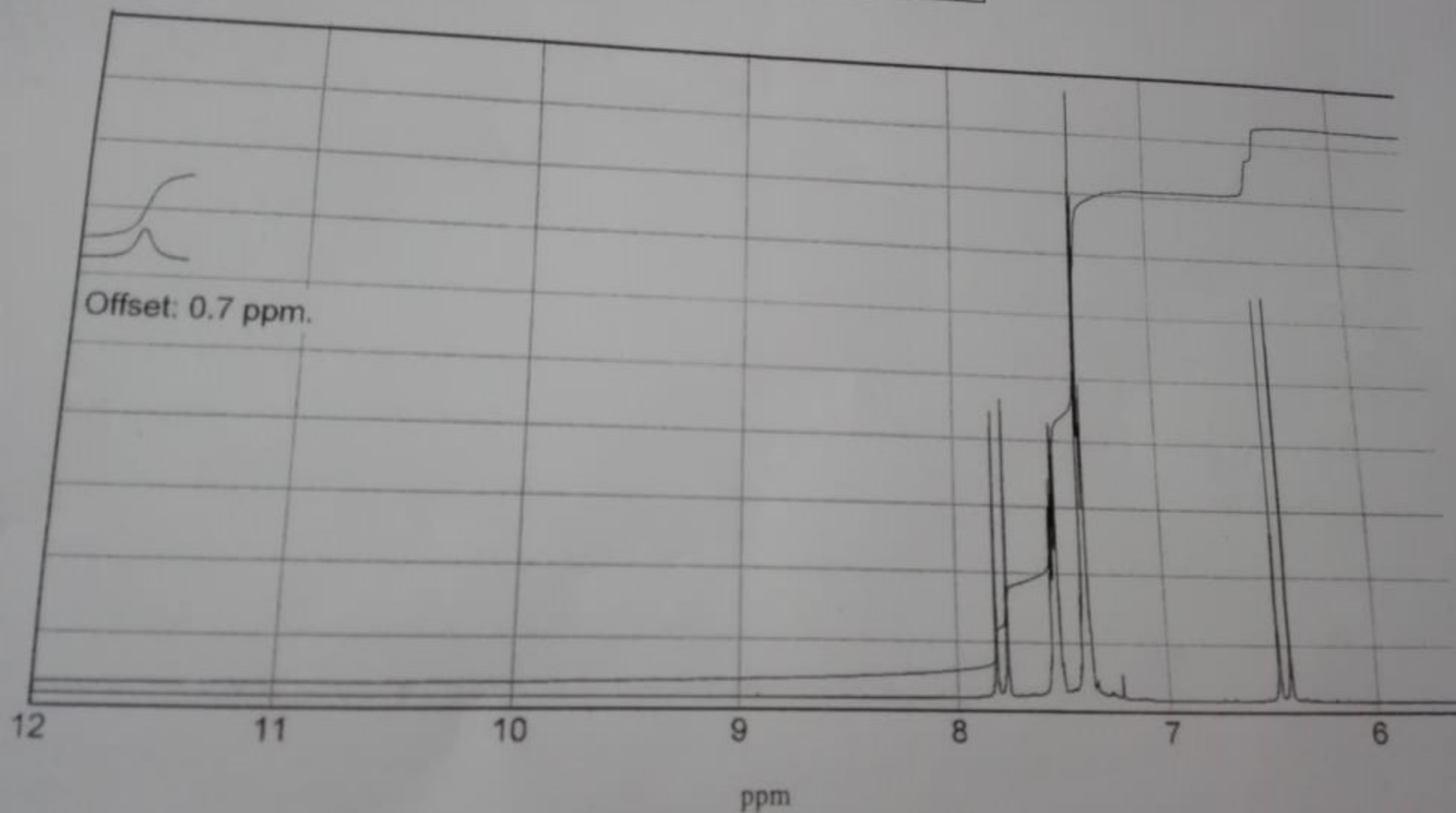
1. Using supplied ^1H -NMR and IR data of *trans*-cinnamic acid:
 - (i) Identify structure of *trans*-cinnamic acid showing different types of hydrogens.
 - (ii) Do the assignment, integration (no. of hydrogens) and splitting pattern.
 - (iii) Do the assignment of the peaks using IR data [2+12+6]
2. Lab Note Book [5]

¹H NMR Spectrum: Sp- 1075
CEMA
¹H NMR spectrum of *trans*-cinnamic acid

δ (in ppm): 7.77, 7.53, 7.37 and 6.43



Offset: 0.7 ppm.



IR Spectrum:

Sr- 1075
CENA

IR spectrum of *trans*-cinnamic acid

$\tilde{\nu}$ (in cm^{-1}): 2925, 1680, 1630 and 1450

