

LIST OF TABLES

PART-1

CHAPTER-4

<i>Number</i>	<i>Page No.</i>
Table 4.1: Interplanner spacings (d_{100}) Å, Peak intensity (PI) and relatives intensity (RI) in counts of the medicinal plant leaves sample A-Nephafu, B-Mahaneem, C-Tulsi & D-Nayantora	65
Table 4.2: Interplanner spacings (d_{100}) Å, Peak intensity (PI) and relatives intensity (RI) in counts of the medicinal plant fruits sample E-Bandordima & F-Sarumoin	66
Table 4.3: Intensity counts of medicinal plant leaves recorded in XRF Spectrometer of A-Nephafu, B-Mahaneem, C-Tulsi and D-Nayantora	77
Table 4.4: Intensity counts of medicinal plants fruits recorded in XRF Spectrometer for E-Bandordima and F-Sarumoin	78
Table 4.5. TG, DTG and DTA Data under different media (Air, Oxygen and Nitrogen) for sample A	119
Table 4.6: Activations Energy (E) and change of entropy (ΔS) computed from TG & DTG thermograms of sample (A) under different media (Air, Oxygen & Nitrogen) for sample A	119
Table 4.7: TG, DTG and DTA Data under different media (Air, Oxygen and Nitrogen) for sample B	120
Table 4.8: Activations Energy (E_1) and change of entropy (ΔS) computed from TG & DTG thermograms of sample B under different media (Air, Oxygen & Nitrogen)	120
Table 4.9: TG, DTG and DTA Data under different media (Air, Oxygen and Nitrogen) for sample C	121
Table 4.10. Activations Energy (E_1) and change of entropy (ΔS) computed from TG & DTG thermograms of sample C under different media (Air, Oxygen & Nitrogen)	121

Table 4.11. TG, DTG and DTA Data under different media (Air, Oxygen and Nitrogen)for sample D	122
Table 4.12. Activations Energy (E) and change of entropy (ΔS) computed from TG & DTG thermograms of sample (D) under different media (Air, Oxygen & Nitrogen)	122
Table 4.13: TG, DTG and DTA Data under different media (Air, Oxygen and Nitrogen) for sample E	123
Table 4.14: Activations Energy (E_1) and change of entropy (ΔS) computed from TG & DTG thermograms of sample E under different media (Air, Oxygen & Nitrogen)	123
Table 4.15. TG, DTG and DTA Data under different media Air, Oxygen and Nitrogen) for sample F	124
Table 4.16: Activations Energy (E_1) and change of entropy (ΔS) computed from TG & DTG thermograms of sample F under different media (Air, Oxygen & Nitrogen)	124
Table 4.17: Reaction kinetic data of the DSC thermograms at transition periods	125

PART-II

CHAPTER-2

Table 2.1: Physical and Spectral data of the compound MK-001	146
--	-----

CHAPTER-3

Table 3.1: Physical and Spectral data of the compound MN-01	163
Table 3.2: Physical and Spectral data of the compound MN-02	163

PART-III

CHAPTER-2

Table 2.1: Crystal data and structure refinement for 6 α acetoxy azadirone” (MK-001)	238
Table 2.2. Anisotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for MK-001. The anisotropic displacement factor exponent takes the form: $-2\pi^2 [h^2 a^{*2} U^{11} + \dots + 2 h k a^* b^* U^{12}]$	249
Table 2.3: Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters	

($\text{\AA}^2 \times 10^3$) for MK-001	251
Table 2.4: Atomic coordinates ($\times 10^4$) and equivalent isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for MK-001. $U(\text{eq})$ is defined as one third of the trace of the orthogonalized U_{ij} tensor	253
Table 2.5: Bond distances (\AA) involving non-hydrogen atoms with e.s.d's in parenthesis for MK-001.	255
Table 2.6: Bond angles (deg) involving non-hydrogen atoms, with e.s.d's in parenthesis for MK-001	256
Table 2.7: Bond distances (Angstrom) involving hydrogen atoms, with e.s.d's in parenthesis for MK-001	259
Table 2.8: Bond angles (deg) involving hydrogen atoms, with e, s, d's in parenthesis for MK-001	260
Table 2.9: Torsion angles (deg) for MK-001	263
Table 2.10: Intermolecular contacts less than 4.00\AA for the non-hydrogen atoms	267
CHAPTER-3	
Table 3.1. Crystal data and structure refinement for MN-02	276
Table 3.2 Anisotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for MN-02. The anisotropic displacement factor exponent takes the form: $-2\pi^2 [h^2 a^* 2U^{11} + \dots + 2 h k a^* b^* U^{12}]$	287
Table 3.3. Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for MN-02.	290
Table 3.4. Atomic coordinates ($\times 10^4$) and equivalent isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for MN-02. $U(\text{eq})$ is defined as one third of the trace of the orthogonalized U_{ij} tensor	293
Table 3.5: Bond distances (\AA) involving non-hydrogen atoms with e.s.d's in parenthesis for MN-02	295
Table 3.6: Bond angles (deg) involving non-hydrogen atoms, with e.s.d's in parenthesis for MN-02	296
Table 3.7: Bond distances (Angstrom) involving hydrogen atoms, with e.s.d's in parenthesis for MN-02	297

Table 3.8: Bond angles (deg) involving hydrogen atoms, with e, s, d's in parenthesis for MN-02	298
Table 3.9. Torsion angles [°] for MN-02	300
Table 3.10 Intermolecular contacts less than 4.00 Angstrom for MN-02	303
CHAPTER-4	
Table 4.1. Crystal data and structure refinement for MN-01	314
Table 4.2 Anisotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for MN-01. The anisotropic displacement factor exponent takes the form: $-2\pi^2 [h^2 a^2 U^{11} + \dots + 2 h k a^* b^* U^{12}]$	325
Table 4.3: Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for MN-01	327
Table 4.4: Atomic coordinates ($\times 10^4$) and equivalent isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for MN-01. U (eq) is defined as one third of the trace of the orthogonalized U^{ij} tensor	328
Table 4.5: Bond distances (\AA) involving non-hydrogen atoms with e.s.d's in parenthesis for MN-01	330
Table 4.6. Bond angles (deg) involving non-hydrogen atoms, with e.s.d's in parenthesis for MN-01	331
Table 4.7: Bond distances (Angstrom) involving hydrogen atoms, with e.s.d's in parenthesis for MN-01	332
Table 4.8: Bond angles (deg) involving hydrogen atoms, with e, s, d's in parenthesis for MN-01	333
Table 4.9. Torsion angles [°] for MN-01	335
Table 4.10 Intermolecular contacts less than 4.00 Angstrom for MN-01	338
