LIST OF TABLES

Chapter	Page Nos.
Chapter 2	
2.1. Phytochemical Screening Tests	
2.2. List of targets, their accession nos., sources, resolution and details of m	ethod by which
structure was obtained based upon the RCSB protein data bank	
2.3. List of primers	75
Chapter 3	
3.1. Percent yield and nature of the non-polar extracts of <i>Aloe vera</i> gel	80
3.2. Phytochemical Screening of non-polar extracts of <i>Aloe vera</i> gel	
3.3. Percent yield, nature and quantitative estimation phytosterols in the pet	roleum ether
extract of Aloe vera gel	81
3.4. Summary of fractionation of Petroleum ether extract of Aloe vera gel b	y column
chromatography	
3.5. Phytochemical constituents identified in the petroleum ether extract of	Aloe vera gel
using gas chromatography-mass spectrometry	84
3.6. Phytochemical constituents identified in LP1 using gas chromatography	y-mass
spectrometry	
3.7. Phytochemical constituents identified in LP2 using gas chromatography	y-mass
spectrometry	86
3.8. Phytochemical constituents identified in LP3 using gas chromatography	y-mass
spectrometry	86
3.9. Phytochemical constituents identified in LP4 using gas chromatography	y-mass
spectrometry	86
3.10. Phytochemical constituents identified in LP5 using gas chromatograph	hy-mass
spectrometry	
3.11. Calibration curves, correlation coefficients, linear ranges and LLOQ of	of the non-polar
phytocomponents of Aloe vera gel	92
3.12. The intra-day and inter-day accuracies and precisions of the non-polar	r
phytocomponents of Aloe vera gel at low, medium, and high concentration	levels93
3.13. Extraction recoveries and matrix effects of the non-polar phytocompo	nents of Aloe vera
gel at low, medium, and high concentration levels	94

3.14. Pharmacokinetic parameters in the plasma of rats97
Chapter 4
4.1. Induced fit docking results of partially purified non-polar phytocomponents of Aloe vera
gel docked with key steroidogenic and metabolic targets110
4.2. "In-silico" ADME of the partially purified non-polar phytocomponents of Aloe vera
gel113
4.3: IC50 values at 24 hours exposure of the PPNPPs of Aloe vera gel on the KGN cell-
line
Chapter 5
5.1. Synergistic effect of hyperinsulinemia and hyperandrogenaemia on the Hormone
Secretion by Primary Culture of Luteinized Granulosa Cells
5.2. Synergistic effect of hyperinsulinemia and hyperandrogenaemia on the Hormone
Secretion by KGN cell-line140
Chapter 6
6.1. Dose and time- dependent effect of Letrozole on the estrus cyclicity of adult female
Balb/c mice154
6.2. Effect of different treatments on Fasting Glucose, Fasting Insulin and HOMA-IR in
plasma of Letrozole induced PCOS mice model158
6.3. Effect of different treatments on the estrus cyclicity of Letrozole induced PCOS mice
model161
6.4. Concentration of partially purified non-polar phytochemicals (PPNPP) from Aloe vera
gel in the plasma and ovaries of Letrozole induced mice
6.5 Effect of Different Treatment on General Appearance and Behavioural Observations170
6.6 Effect of Different Treatments on various Biochemical parameters