LIST OF TABLES

Table No	Title	Page
2 1	Various methods of Contraception	14-15
2.2	Advantages and Limitations of Nasal Drug Delivery	27
23	Physicochemical, anatomical, physiological and formulation factors affecting the nasal absorption of drugs	28
2.4	Factors that may affect the pulmonary absorption rate and bioavailability	49
2 5	Primary packaging for DPI drug formulation	59
2.6	Potential Therapeutic Applications of Liposomes Based Systems in Lung Delivery	64
3 1	Calibration curve for the estimation of Phosphatidyl choline	96
3.2	Calibration curve for the estimation of Cholesterol	98
3 3	Calibration curve for the estimation of Levonorgestrel by spectrophotometry	100
3.3	Calibration curve for the estimation of Levonorgestrel by Spectrofluorimetry	101
3.4	Calibration curve for the estimation of Leuprolide acetate by spectrophotometry	102
3.5	Calibration curve for the estimation of Leuprolide acetate by Radioimmunoassay	103
3.6	Interference of excipients used in the formulations	107
4.1	Selection of Process Variables for Preparation of LN Liposomes	128
4.2	Influence of Freeze-thaw cycles on Percent Drug Entrapment of Levonorgestrel Liposomes	132
4.3	Effect of Hydration time on PDE of liposomes prepared by TFH and REV method	134
4.4	Effect of time and temperature of freezing on PDE evaluated in Batch LLN5	134
4.5	Effect of Post Sonication Freeze-thaw cycle on LLN, Batch 05	136
4.6	Set parameters in Methodology selected for preparation of LEU	142

-		- 3° . Lay,
	liposomes 4.5.5.5	1
4 7	Effect of Extrusions on Prepared Liposomes of LEU	145
1.8	Analytical-profile of Final Liposomal batches of LN and LEU	150.
		174
5.1-	Plain and liposomal Formulations	174
5 2	Mucoadhesion Test for Different Formulations	174
5.3	Percent Drug Retention (PDR) in Batch LLN at different storage conditions	178
5.4	Percent Drug Retention (PDR) in liposomal formulations of LEU at	179
-	different storage conditions	-
5.5	In vitro-diffusion studies of LN formulations	182
5.6	Regression Coefficients of LN Formulations by different models	183
5 7	Mean Flux and Diffusion Coefficient values of LN formulations	184 .
8	In vitro diffusion studies of LEU formulations	185
59.	-Regression Coefficients of LEU Formulations by different models	186
5.10	Mean Flux and Diffusion Coefficient values of LEU formulations	187
5.11	Pharmacokinetics of different formulations following Oral and Nasal Administration of LN in rats	189
5.12	Antifertility effect of Levonorgestrel treated with different formulations	.190
5.13	Pharmacodynamic parameters of LEU formulations following s c. and nasal administration	195
5.14	Sperm count after 26 days treatment with selected formulations	196
5.1	Selection and optimization of cryoprotectant for efficient lyophilization of LN liposomes	220
5.2	Selection and optimisation of cryoprotectant for efficient lyophilization of LLEU liposomes	221
5.3	Selection and optimisation of cryoprotectant for efficient lyophilization of LLEUn liposomes	222
5.4	Characterization of potential batches of liposomal DPI Formulations	226

6 5	Comparison of Bulk density and particle size data for Pharmatose 325M and Sorbolac 400	227
6.6	Percent drug retention in LLN formulation at different storage conditions	230
6.7	Percent drug retention in LLEU formulations at different storage conditions	231
6.8	In vitro diffusion studies of LN formulations	233
6.9	Regression Coefficients of LN Formulations by different models	234
6 10	Mean Flux and Diffusion Coefficient values of LN formulations	235
6 1 1	In vitro diffusion studies of LEU formulations	236
6 12	Regression Coefficients of LEU Formulations by different models	237
6.13	Mean Flux and Diffusion Coefficient values of LEU formulations	238
5.14 -	Pharmacokinetics of different formulations of LN following oral and intratracheal administration in rats	241
6.15	Pharmacodynamic parameters of LEU formulations following subcutaneous (s.c.) and intratracheal (i t) administration	242