

INDEX

S.No	Chapters	Page No.
1.	INTRODUCTION	1-23
1.1	Nanomedicine	1-2
1.2	Targeted Drug Delivery System	2-10
1.3	Cancer	10-16
1.4	Types Of Nanoparticles	17-22
1.5	Prospects Of Nanoparticle Drug Delivery:	23
2	Research Envisaged & Plan Of Work	24-26
2.1	Expected Outcome Of The Proposed Work	24-26
3.	Literature Review	27-30
4.	Drug And Excipient Profile	31-40
4.1	Bendamustine	31
4.2	Drug Category	32
4.3	Physicochemical Property:	32
4.4	Chemical Structure:	32
4.5	Pharmacology And Mechanism Of Action:	32-34
4.6	Excipient Profile	34-40
5	Material And Methods	41-70
5.1	Material	41-42
5.2	Method:	43-47
5.3	Preparation And Characterization Of Nanoparticle	47-50
5.4	Optimization Of Chitosan Based Nanoparticles Prepared By Ionic Gelation Technique	50-59
5.5	Characterization Of Prepared Nanoparticles	60-65
5.6	Formulation And Evaluation Of Dosage Form	65-67
5.7	Evaluation Of Prepared Lyophilized Formulations	67-70
6	Result And Discussion	71-134
6.1	Preformulation Study Data Of Bendamustine Loaded Chitosan And PLGA Nanoparticle	71-83
6.2	Preparation Of Chitosan Nanoparticles	83-84
6.3	Optimization Of Chitosan Nanoparticle	84-94
6.4	Characterization Of Bendamustine Loaded Chitosan Nanoparticle	94-101
6.5	Results Of Preparation Of PLGA Nanoparticles By Solvent Diffusion Technique	101-102
6.6	Optimization Of PLGA Nanoparticle	102-110
6.7	Characterization Of PLGA Nanoparticles	110-117
6.8	Formulation And Evaluation Of Dosage Form	117-126
6.9	Formulation Of BM Loaded PLGA Lyophilized Powder	127-134
7	Summery And Conclusion	135-144
7.1	General Overview	135-136
7.2.	Objective Of The Research	136
7.3.	Preformulation Study	136-137

7.4.	Optimization Of Chitosan Nanoparticles	137-138
7.5.	Characterization Of Nanoparticles	138-139
7.6.	Formulation And Evaluation Of Dosage Form	139-140
7.7.	Optimization Of PLGA Nanoparticles	141
7.8.	Characterization Of PLGA Nanoparticles	142-143
7.9.	Formulation And Evaluation Of PLGA Nanoparticles	143-144
7.10	Conclusion:	144
	References	145-161
	List Of Publications	162
	List Of Poster Presented In Conferences	163