# CONTENTS

PREFACE  
(AI)-(v)

ACKNOWLEDGEMENTS

## CHAPTER - I : 1. BASIC CONCEPTS OF INVENTORY  1-44

1.1. INTRODUCTION  
1.2. CONCEPT OF INVENTORY  
1.3. RELEVANT FACTORS IN INVENTORY CONTROL  
1.4. OBJECTIVES AND CONSTRAINTS OF INVENTORY SYSTEM  
1.5. PURPOSE OF INVENTORY POLICIES  
1.6. INVENTORY SYSTEM COSTS  
1.7. SUPPLY AND DEMAND BEHAVIOUR  
1.8. CLASSIFICATION OF INVENTORY MODELS  
1.10 DETERMINISTIC AND PROBABILISTIC MODELS  
1.11. THE DETERMINISTIC LOT SIZE MODELS  
1.12. DETERMINISTIC ORDER LEVEL INVENTORY MODEL  
1.13. PROBABILISTIC INVENTORY MODELS.

## CHAPTER - II : 2. REVIEW OF INVENTORY MODELS WITH INVENTORY RETURNS AND SPECIAL SALES  45-68

2.1. INVENTORY MODELS WITH CONSTRAINTS  
2.2. REVIEW OF INVENTORY MODELS FOR DETERIORATING ITEMS  
2.3. REVIEW OF INVENTORY MODELS WITH POWER PATTERN DEMAND.
CHAPTER - III: 3. AN ORDER LEVEL INVENTORY MODEL FOR
DETERIORATING ITEMS WITH INVENTORY 
RETURNS AND SPECIAL SALES. 69 - 89

3.1. INTRODUCTION 3.2. ASSUMPTIONS AND NOTATIONS 3.3. AN INFINITE HORIZON
MODEL 3.4. FINITE HORIZON MODEL

CHAPTER - IV: ORDER LEVEL INVENTORY MODEL FOR POWER
PATTERN DEMAND WITH INVENTORY RETURNS
AND SPECIAL SALES 90 - 100

4.1. INTRODUCTION 4.2. ASSUMPTIONS AND NOTATIONS 4.3. MODEL DESCRIPTION
AND ANALYSIS 4.4. SOLUTION METHOD WITH n= 2 . 4.5. NUMERICAL ILLUSTRATION
4.6. SENSITIVITY ANALYSIS WITH RESPECT TO PATTERN INDEX.

CHAPTER - V: STOCHASTIC ORDER LEVEL INVENTORY MODEL
WITH INVENTORY RETURNS AND SPECIAL SALES
101 - 121

5.1. INTRODUCTION 5.2. MODEL ASSUMPTIONS AND NOTATIONS 5.3 MODEL WITH
NON-DETERIORATING ITEMS 5.4. COMPUTATIONAL RESULTS 5.5. LINEARITY
ASSUMPTIONS AND ERROR ANALYSIS 5.6. MODEL WITH DETERIORATING ITEMS.

REFERENCES