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Nota di contenuto	Section 1: Inventory models with trade credit financing for imperfect quality items -- Chapter 1. An economic production quantity (EPQ) inventory model for deteriorating item under two-level trade credit policy with allowable shortages -- Chapter 2. Deteriorating imperfect produce inventory for time dependent demand under Radio frequency Identification adoption with preservation and trade credit -- Chapter 3. EOQ Model Under Discounted Partial Advance - Partial Trade Credit Policy with Price Dependent Demand -- Chapter 4. Stock Dependent Inventory Model for Imperfect Items under Permissible Delay in Payments -- Chapter 5. A Discrete-in-Time inventory model under Stockout based Substitution -- Chapter 6. An economic order quantity inventory model with shortage considering wastage uncertainty for Fish/pig/poultry farmers -- Chapter 7. Retailer's replenishment policies

under two level trade credit policy with defective items in a supply chain model when demand depends on both selling price and credit period -- Chapter 8. Effects of pre and post deterioration price discounts on selling price in formulation of an ordering policy for an inventory system: A study -- Chapter 9. An Inventory Control Policy for Time Dependent Perishable Item with Variable Demand under Two Levels Order Linked Trade Credit -- Chapter 10. Inventory policies for fixed life products having time and price sensitive demand under promotion efforts with advance payments option -- Chapter 11. An inventory model of deteriorating items for stock dependent demand with time varying holding cost and random decay start time -- Section 2: Environmental impact on the ordering policies -- Chapter 12. Inventory Models with Environmental Consideration for Imperfect Quality Items -- Chapter 13. Effect of carbon footprints during transportation in a supply chain model under inflation -- Chapter 14. Emission Effect on Supply Chain for Imperfect Quality Items under Trade Credit Policy -- Section 3: Impact of learning on the supply chain models -- Chapter 15. Efficient supplier's selection: one way to inventory control -- Chapter 16. An Application of Genetic Algorithm for Order Allocation amongst Suppliers -- Chapter 17. Effect of Manufacturer's Innovation and Retailer's Promotion under Centralized and Decentralized Options -- Chapter 18. Optimal ordering policy of substitutable products for supermarket under joint replenishment Inventory control -- Chapter 19. An efficient – hybrid optimization approach for Closed – loop supply chain under randomness -- Section 4: EOQ models considering warehousing -- Chapter 20. Asymmetric supply chain model with imperfect items and variable demand: A Control Theoretic Approach -- Chapter 21. Effect of learning on optimal policies of supply chain partners for imperfect quality items: Game theoretic approach -- Chapter 22. A Production Reliable Model for Imperfect Items with Random Machine Breakdown under Learning and Forgetting -- Section 4: EOQ models considering warehousing -- Chapter 23. A marketing decision oriented two warehouses inventory system under displayed stock level dependent consumption rate -- Chapter 24. Credit Financing in Two Warehouse Environment For Defective Items with Allowable Shortages -- Chapter 25. Two-warehouse inventory model with quantity discount policy -- Section 5: Optimal Ordering policies with datamining and PSO techniques -- Chapter 26. Decision Making with Temporal Association Rule Mining and Clustering in Supply Chains -- Chapter 27. A Nature Inspired Computational Method to Optimise Solutions to a Problem by Refining Candidate Solutions using Particle Swarm Optimisation -- Section 6: Supply chain models in fuzzy environment -- Chapter 28. A Fuzzy Two-Echelon Supply Chain model for deteriorating items with time varying holding cost involving lead time as a decision variable -- Chapter 29. A Soft-Computing Approach on inventory model for deteriorating items with Genetic algorithm in Fuzzy Environment -- Section 7: Optimal production models for multi-items and multi-retailer -- Chapter 30. Optimal production-inventory policies for processed fruit juices manufacturer and multi-retailers with trended demand and quality degradation -- Chapter 31. Multi-Product Optimization of Supply Chain using Multi-Objective Genetic Algorithm -- Section 8: Marketing model to understand buying behaviour -- Chapter 32. Interpretive Structural Modelling to understand factors influencing buying behaviour of Air-Freshener.

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## Sommario/riassunto

This book discusses inventory models for determining optimal ordering policies using various optimization techniques, genetic algorithms, and data mining concepts. It also provides sensitivity analyses for the

models' robustness. It presents a collection of mathematical models that deal with real industry scenarios. All mathematical model solutions are provided with the help of various optimization techniques to determine optimal ordering policy. The book offers a range of perspectives on the implementation of optimization techniques, inflation, trade credit financing, fuzzy systems, human error, learning in production, inspection, green supply chains, closed supply chains, reworks, game theory approaches, genetic algorithms, and data mining, as well as research on big data applications for inventory management and control. Starting from deterministic inventory models, the book moves towards advanced inventory models. The content is divided into eight major sections: inventory control and management – inventory models with trade credit financing for imperfect quality items; environmental impact on ordering policies; impact of learning on the supply chain models; EOQ models considering warehousing; optimal ordering policies with data mining and PSO techniques; supply chain models in fuzzy environments; optimal production models for multi-items and multi-retailers; and a marketing model to understand buying behaviour. Given its scope, the book offers a valuable resource for practitioners, instructors, students and researchers alike. It also offers essential insights to help retailers/managers improve business functions and make more accurate and realistic decisions.

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