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Notice for the PhD Viva Voce Examination

Mr Leslie Dass P, Registration Number: 2190073, PhD Scholar at the School of Business and Management, CHRIST (Deemed to be University) will defend his PhD thesis at the public viva-voce examination on Tuesday, 12 May 2026 at 03.00 pm in Room No. 044, Ground Floor, R&D Block, CHRIST (Deemed to be University), Bengaluru - 560029, Karnataka, India.

Title of the Thesis	:	**Analysis of Supply Chain Risk Management in the Indian Medical Device Industry**
Discipline	:	**Management**
External Examiner - I	:	**Dr M Rajmohan** Professor Department of Industrial Engineering College of Engineering, Guindy Anna University Sardar Patel Road, Guindy Chennai - 600025 Tamil Nadu
External Examiner - II	:	**Dr B Koteswararao Naik** Professor Department of Operations (Supply Chain Management) Indian Institute of Management Mumbai Vihar Lake Road Powai, Mumbai - 400087 Maharashtra
Supervisor	:	**Dr Sreerengan V R** Associate Professor School of Business and Management CHRIST (Deemed to be University) Bengaluru - 560029 Karnataka

The members of the Research Advisory Committee of the Scholar, the faculty members of the Department and the School, interested experts and research scholars of all the branches of research are cordially invited to attend this open viva–voce examination.

Registrar (Academics)

Place: Bengaluru
Date: 04 May 2026

ABSTRACT

The increasing complexity and uncertainty in global supply chains necessitate an integrated approach to managing profitability, resilience, and sustainability. This study develops and tests three optimization models to address key supply chain challenges: (i) a profitability-driven Mixed Integer Linear Programming (MILP) model, (ii) a stochastic resilience model based on the Supply Chain Resilience Index (SCRI), and (iii) a sustainability impact optimization model. These models provide a structured framework for decision-makers to balance financial performance, risk mitigation, and environmental impact reduction. The study applies scenario-based stochastic optimization and benchmarking techniques to evaluate the models in realistic supply chain conditions. The findings highlight the interdependencies between financial optimization, operational resilience, and sustainability efforts, emphasizing the need for a holistic decision-making approach. The research contributes to supply chain management literature by offering quantitative methods for enhancing strategic decision-making under uncertainty. Future research should explore dynamic disruption scenarios, multi-period decision-making frameworks, and the impact of evolving regulatory policies on supply chain optimization.

Keywords: *supply chain risk management, MCDM, profitability, resilience, sustainability, optimisation*

Publications:

1. **Dass, P. L.**, Nair, S. V., Kurien, G. P., & Chandar, S. K. (2024). A Fuzzy AHP Approach to Evaluation of Value Addition in the Indian Medical Equipment Supply Chain. In *Congress on Intelligent Systems* (pp. 43-60). Singapore: Springer Nature Singapore.

2. **Dass, P. L.**, Nair, S. V., Chandar, S. K., & Kurien, G. P. (2025). A Multicriteria Decision-Making Approach to Building Resilience Along the Indian Medical Equipment Supply. *Business Intelligence and Data Analytics: Proceedings of BIDA 2024*, *413*, 159.

3. **Dass, P. L.**, Nair, S. V., Kurien, G. P., & Chandar, S. K. (2025). A systematic literature network analysis approach to assess the topology of modern-era supply chain risk management research. *International Journal of Industrial and Systems Engineering*, *50*(1), 106-145.

4. **Dass, P. L.**, & Nair, S. V. (2025). The influence of sustainability risk management on supply chain sustainability and profitability of medical technology firms. *International Journal of Services and Operations Management*, *50*(3), 389-413.