



POST GRADUATE UNIVERSITY EXAMINATIONS
SCHOOL OF MANAGEMENT AND LEADERSHIP
DEGREE OF MASTER OF BUSINESS ADMINISTRATION

LSO 502: E- SUPPLY CHAIN MANAGEMENT

DATE: 30TH JULY 2026

DURATION: 3 HOURS

MAXIMUM MARKS: 60

INSTRUCTIONS:

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **FOUR (4)** questions.
4. Question **ONE is compulsory**.
5. Answer any other **TWO** questions.
6. Question **ONE** carries **30 MARKS** and the rest carry **15 MARKS** each.
7. **Write all your answers in the Examination answer booklet provided**

QUESTION ONE

Read the Case Study below carefully and answer the questions that follow.

DIGITAL TRANSFORMATION OF KENYA NATIONAL DISTRIBUTION AGENCY (KNDA)

Kenya National Distribution Agency (KNDA) is a public-sector logistics and procurement organization responsible for distributing medical supplies, agricultural inputs, and educational materials across Kenya. Over the last five years, KNDA has experienced increasing operational complexity due to population growth, rising customer expectations, and the expansion of devolved government services. To address inefficiencies, KNDA initiated an ambitious e-supply chain transformation programme. The organization implemented an ERP-integrated e-procurement platform, automated inventory management systems, and cloud-based logistics tracking technologies. The new systems were designed to improve visibility, transparency, accountability, and responsiveness across the national distribution network.

Despite these investments, KNDA continues to face several challenges. Some county offices experience system downtime due to poor infrastructure, suppliers complain about digital onboarding requirements, and employees resist workflow automation because of fears of job displacement. In addition, KNDA recently experienced a cyber-security incident that temporarily disrupted procurement and inventory operations. At the same time, the Kenyan government has intensified pressure on public organizations to integrate sustainability and environmental accountability into supply chain operations. KNDA has therefore introduced green procurement policies, route optimization technologies, and electronic documentation systems aimed at reducing paper waste and carbon emissions.

Senior management has now established a strategic transformation committee to evaluate the effectiveness of the e-supply chain initiative

and recommend long-term improvements in governance, automation, sustainability, supplier integration, and organizational resilience.

Required:

- a) Critically evaluate five strategic roles of e-supply chains and workflow automation in improving KNDA's operational performance and competitiveness. **(10 marks)**
- b) Examine the governance, cyber security, and change management challenges affecting the implementation of KNDA's e-supply chain systems. **(10 marks)**
- c) Recommend five advanced strategies that KNDA should adopt to strengthen e-procurement, and organizational sustainability. **(5 marks)**
- d) Recommend five advanced strategies that KNDA should adopt to strengthen stakeholder integration, and long-term organizational resilience. **(5 marks)**

QUESTION TWO

- a) An agro-based organisation is in the process of implementing e-supply chains foundations in all its branches. Critically analyze three theoretical foundations of e-supply chains and evaluate their relevance in contemporary digital supply chain management. **(8 marks)**
- b) Company XY has faced several challenges in its implementation of e-supply chain platforms. Examine how strategic alignment, organizational integration, and knowledge management contribute to e-supply chain performance and sustainable competitive advantage. **(7 marks)**

QUESTION THREE

a) The Kenyan government has made it mandatory for all public sector procurements to be done through an electronic platform. Evaluate the strategic importance of e-procurement systems in modern organizations and assess the governance and ethical issues associated with their implementation. **(8 marks)**

b) Developing countries are in a race for digital transformation. Discuss the role of ERP integration in ensuring successful e-procurement implementation in developing economies. **(7 marks)**

QUESTION FOUR

a) The benefits of green supply chain management in both service and manufacturing entities cannot be gainsaid. Critically examine four strategic roles of Green Supply Chain Management (GSCM) in promoting sustainability, competitiveness, and resilience in modern organizations **(8 marks)**

b) Manufacturing firms need to have environmentally friendly supply chains. Analyze the challenges associated with Green Supply Chain Management and supply chain sustainability. **(7 marks)**