

KIBABII UNIVERSITY



UNIVERSITY EXAMINATIONS

MAIN EXAMINATIONS

**2022/2023 ACADEMIC YEAR
THIRD YEAR, SECOND SEMESTER
FOR THE DEGREE OF BACHELOR OF COMMERCE**

COURSE CODE: BBL 323

COURSE TITLE: SUSTAINABLE LOGISTICS PRACTICES

DATE: 20/04/2023

TIME: 2:00-4:00PM

INSTRUCTIONS TO CANDIDATES

- 1) Answer Question **ONE** (Compulsory) and **ANY OTHER TWO** Questions
 - 2) Candidates must hand in their answer booklets to the invigilator while in the examination room
 - 3) Credit is given for legibility, clarity and use of relevant examples
 - 4) Question **ONE** is **30 marks** while Questions **2-5** carry **20 marks** each
 - 5) Clearly write your **Registration Number** on each answer sheet used
-

TIME: 2 Hours

KIBU observes **ZERO** tolerance to examination cheating

QUESTION ONE

CASE STUDY

Pyrex Logistics Inc.

Pyrex Logistics is a freight transportation firm based in the United States that specializes in providing less-than-truckload and truck brokerage services to customers in 18 countries. Automation and intelligent machines, anticipating demand, predictive analytics, pricing algorithms, workforce planning, load and route optimization, customer support, and Pyrex 's digital freight marketplace are all areas where IT specialists and data scientists are employed. Pyrex Logistics improves pricing algorithms and network productivity in its LTL network with machine learning and predictive analytics. In 2019, Pyrex became the first global logistics company to join the Massachusetts Institute of Technology (MIT) Industrial Liaison Program, a collaboration that brings MIT resources together with businesses around the world to address global business concerns. Other technology initiatives include the proprietary Pyrex Connect digital freight marketplace and Drive Pyrex carrier mobile app, which connect shippers with carriers and provide real-time market visibility; and the proprietary Pyrex Connect digital freight marketplace and Drive Pyrex carrier mobile app, which connect shippers with carriers and enable real-time market visibility. A truck transportation expedited bid system that uses an automated, web-based auction portal to match loads to carriers, as well as an online bid platform for air charter and air freight shipments that require accelerated service; VR and AR applications in development for internal staff, clients, and household customers.

QUESTION ONE

- a) List **THREE** service dimensions that customers at Pyrex Logistics care about. (3marks)
- b) Mention **FOUR** tips that you would recommend to Pyrex Logistics for building a successful logistics strategy (4marks)
- c) State any **THREE** waste reduction strategies that can be adopted by Pyrex Logistics to minimize resource and energy use during production.(3Marks).
- ii) Identify **THREE** indicators of improvement in operational performance at Pyrex Logistics (3Marks).
- iii) Identify **FOUR** key challenges that can be a destabilizing influence on the delivery of humanitarian services to the community in need (4Marks)
- d) Identify **THREE** impacts of legislations and policies that would influence the adoption of supply chain practices Pyrex Logistics.(3Marks)
- e) Explain **THREE** uses of Drones in supply chain and logistics(3Marks)

- f) Explain **THREE** functions of Logistics within Supply Chain Management(3Marks).
- g) List **FOUR** measures that would influence effectiveness of logistics processes at Pyrex Logistics (4Marks)

QUESTION TWO

- a) Demonstrate **FIVE** logistics strategies that organisations are developing their based around environmental protection. (10Marks)
- b) What are the necessary steps to implement a sustainable logistics model (10 Marks)

QUESTION THREE

- a) Analyze **FIVE** benefits of reverse logistics to firms(10Marks)
- b) Recommend **FIVE** responses of a logistics firm to the impact of COVID-19 on global supply chains(10Marks)

QUESTION FOUR

- a) Appraise **FIVE** benefits of building an effective logistics strategy(10Marks)
- b) Critique **FIVE** Logistics and Supply Chain trends affecting sustainability (10Marks)

QUESTION FIVE

- a) Analyze **FIVE** key problems derailing performance of firms in the logistics industry.(10 Marks)
- b) Appraise **FIVE** effects of disasters on Supply Chains and Logistics (10Marks)