



**NAMIBIA UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY  
FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

**DEPARTMENT OF MARKETING, LOGISTICS AND SPORT MANAGEMENT**

<b>QUALIFICATION:</b> BACHELOR OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT	
<b>QUALIFICATION CODE:</b> 07BLSC	<b>LEVEL:</b> 6
<b>COURSE CODE:</b> EHL621S	<b>COURSE NAME:</b> ENVIRONMENTAL AND HUMANITARIAN LOGISTICS
<b>SESSION:</b> NOVEMBER 2025	<b>PAPER:</b> THEORY
<b>DURATION:</b> 3 HOURS	<b>MARKS:</b> 100

<b>FIRST OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
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<b>MODERATOR:</b>	MS. E JESAYA

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. Answer ALL the questions.</li><li>2. Read all the questions carefully before answering.</li><li>3. Number the answers clearly</li></ol>

**THIS EXAMINATION PAPER CONSISTS OF 8 PAGES (including this front page)**

**SECTION A: MULTIPLE CHOICE AND TRUE/FALSE QUESTIONS**

**50 MARKS**

**QUESTION 1: MULTIPLE CHOICE**

Write the letter next to the correct answer.

**2X20=40 MARKS**

**QUESTION 1: MULTIPLE CHOICE QUESTION**

**[40 MARKS]**

**ANSWER ALL QUESTIONS**

1. Which of the following most comprehensively defines environmental sustainability?
  - a) Use of natural resources at a rate that allows them to replenish and supports ecosystem health for the long term
  - b) Maximizing industrial output with minimal regard for ecological footprints
  - c) Reliance on non-renewable energy sources balanced by technological advances
  - d) Economic growth prioritized over environmental limits
  
2. Among renewable energy sources, which has the greatest challenge regarding intermittent availability and grid integration?
  - a) Solar power
  - b) Hydropower
  - c) Geothermal energy
  - d) Biomass energy
  
3. Which of the following sustainability challenges is most directly linked to urbanization and industrialization expansion?
  - a) Increased biodiversity
  - b) Resource depletion and increased greenhouse gas emissions
  - c) Improved waste recycling rates
  - d) Transition to circular economy models
  
4. Measuring environmental impact using Life Cycle Assessment (LCA) mainly focuses on:
  - a) Economic profitability over the product's lifespan
  - b) Resource consumption, emissions, and waste outputs at all stages of a product's lifecycle
  - c) Consumer preferences and satisfaction
  - d) Manufacturing speed and output
  
5. A sustainability scorecard generally integrates which of the following dimensions within organizational reporting?
  - a) Financial performance only
  - b) Environmental, social, and governance (ESG) metrics alongside financial goals
  - c) Operational efficiency without environmental metrics
  - d) Employee productivity exclusively

6. Which sustainable design approach emphasizes minimizing environmental impact through eco-friendly materials, energy efficiency, and end-of-life recyclability?
  - a) Cradle-to-grave design
  - b) Linear economy design
  - c) Cradle-to-cradle design
  - d) Mass production design
7. Environmental logistics legislation primarily aims to reduce the carbon footprint of transport operations through which measures?
  - a) Subsidizing fossil fuel usage
  - b) Mandating emission controls, promoting modal shifts, and incentivizing green technologies
  - c) Eliminating restrictions on vehicle emissions
  - d) Encouraging faster shipping without ecological considerations
8. Traditional regulatory instruments that enforce environmental compliance typically include:
  - a) Financial penalties, permits, and emission limits
  - b) Voluntary corporate social responsibility initiatives
  - c) Self-regulatory codes without penalties
  - d) Informal community agreements
9. Sustainable (green) logistics strategies include:
  - a) Prioritizing just-in-time delivery without environmental consideration
  - b) Optimizing routes for fuel efficiency, using alternative fuels, and reducing packaging waste
  - c) Maximizing shipment speed at all costs
  - d) Disregarding end-of-life product disposal
10. In Supply Chain Risk Management (SCRM), which element is crucial for reducing disruptions during environmental crises?
  - a) Ignoring supplier vulnerabilities
  - b) Building resilient supplier networks and contingency planning
  - c) Concentrating purchases on a single source for cost advantage
  - d) Minimizing communication to reduce complexity
11. Which characteristic distinctly separates humanitarian logistics from commercial logistics?
  - a) Humanitarian logistics prioritize rapid response under unpredictable, resource-constrained scenarios
  - b) Commercial logistics principally handle emergencies
  - c) Humanitarian logistics do not require accuracy in deliveries
  - d) Commercial logistics ignore customer service levels

12. Which natural disaster type is most exacerbated by climate change-driven sea level rise and increased storm intensity?
- a) Tornadoes
  - b) Hurricanes and coastal flooding
  - c) Earthquakes
  - d) Volcanic eruptions
13. Humanitarian contributors often include which combination of sectors?
- a) Governments, intergovernmental organizations, NGOs, and private sector partners
  - b) Only military and government agencies
  - c) Local businesses excluding NGOs
  - d) Commercial suppliers only
14. The majority of global humanitarian logistics expenditure is allocated to:
- a) Military countermeasures
  - b) Procurement, transport, warehousing, and distribution of relief supplies
  - c) Infrastructure unrelated to disaster zones
  - d) Administrative overhead with no field presence
15. Which logistics challenge in humanitarian operations is most linked to unpredictable access due to damaged or non-existent infrastructure?
- a) Communication systems failure
  - b) Inaccessible terrain and transportation bottlenecks
  - c) Excess funding without proper use
  - d) Oversupply of resources
16. Emergency planning effectiveness primarily depends on:
- a) Reactive measures taken post-disaster
  - b) Proactive coordination, risk assessment, and resource allocation prior to disasters
  - c) Ignoring community participation
  - d) Sole reliance on national government directives
17. Disaster recovery plans that emphasize community involvement and adaptive rebuilding most closely align with:
- a) Short-term humanitarian interventions
  - b) Long-term sustainability and resilience building strategies
  - c) Purely infrastructure-focused reconstruction
  - d) Isolation from affected populations
18. In humanitarian aid, the distinction between short-term and long-term assistance is primarily that:

- a) Short-term addresses immediate survival needs; long-term development tackles economic and social rebuilding
- b) Short-term aid rebuilds infrastructure only
- c) Long-term aid is provided only post-conflict
- d) Both serve identical functions

19. Which factor complicates delivery of humanitarian aid the most in remote disaster-affected areas?

- a) Overstaffed logistics teams
- b) Geographic remoteness, poor transportation infrastructure, and security concerns
- c) Excess supplies with no demand
- d) Well-established local markets

20. Emergency responder circles refer to:

- a) Multi-agency coordination hubs for planning and executing disaster response operations
- b) Social clubs for emergency personnel
- c) Funding committees unrelated to field response
- d) Training workshops for corporate emergencies

**SUB-TOTAL: 40 MARKS**

## **QUESTION 2: SHORT ANSWER QUESTIONS**

**Indicate whether the following case studies represent a risk or a hazard. 10 MARKS**

1. The concept of environmental sustainability focuses primarily on economic growth without accounting for ecological limits.
2. Renewable energy sources inherently produce zero environmental impact at all stages of their lifecycle.
3. One major challenge to sustainability is balancing the increasing resource demands of global populations with finite natural resources.
4. Measuring environmental impact using a sustainability scorecard requires integrating social, economic, and environmental indicators
5. Sustainable product design excludes consideration of product disposal methods as it focuses only on raw material selection.
6. Environmental logistics legislation typically includes market-based instruments and mandates on emissions standards.
7. Traditional regulatory instruments such as command-and-control often lack flexibility compared to economic incentives in environmental management.
8. Sustainable (green) logistics prioritizes reducing carbon emissions even if it results in significantly higher costs.
9. Supply Chain Risk Management (SCRM) involves identifying potential vulnerabilities but not necessarily implementing mitigation strategies.
10. Humanitarian logistics and commercial logistics differ mainly because humanitarian logistics often operate in unstable, resource-constrained environments.

**SUB-TOTAL: 10 MARKS**

**SECTION B: STRUCTURED QUESTION**

**(50 MARKS)**

**QUESTION 3: CASE STUDY**

**10 MARKS**

**This structured question is based on the case study VW emission Scandal (2015).**

The Volkswagen Emissions Scandal of 2015 involved the company installing "defeat devices" in approximately 11 million diesel vehicles to cheat emissions tests. These devices reduced emissions only during testing but allowed vehicles to emit nitrogen oxides up to 40 times above legal limits during normal driving, severely increasing air pollution. VW had marketed these diesel cars as eco-friendly, but the scandal exposed major ethical violations and regulatory breaches, damaging environmental trust. The fallout included over \$25 billion in fines, widespread recalls, executive resignations, criminal charges, and lasting harm to VW's reputation. It also led to tighter regulations and heightened scrutiny of environmental logistics in the automotive sector.

**Required: Explain why the Volkswagen emissions scandal shows the importance of following environmental rules in logistics and supply chains. Give three ways that breaking these rules hurt Volkswagen's business, reputation, and legal standing.**

**QUESTION 4: MATCHING**

**26 MARKS**

**Match the case studies in column A discussing how Toyota created a contingency plan in response to the Tohoku earthquake and tsunami in Japan in 2011 with a corresponding step in column B. Write the number and the corresponding step as the correct answer.**

**2X13=26**

**MARKS**

<b>Case studies</b>	<b>Contingency Steps</b>
1. VW promoted itself as an eco-friendly car manufacturer prior to the scandal.	a. Ethical failure and corporate governance lapses
2. The CEO resigned, and multiple executives faced legal prosecution for their roles in the scandal.	b. Crisis management and corporate recovery efforts
3. Consumer trust in VW and diesel vehicle sustainability was severely damaged globally.	c. Regulatory reform and enhanced oversight Objectives
4. VW installed software (defeat devices) to cheat emissions tests by altering engine performance during testing.	d. Increased harmful air pollution

5. Individuals involved in the scandal faced fines, imprisonment, and reputational damage.	e. Loss of consumer confidence and brand damage
6. VW paid over \$25 billion in fines, settlements, recalls, and retrofitting affected vehicles.	f. Legal and criminal consequences
7. Approximately 11 million diesel vehicles worldwide were affected by the defeat device software.	g. Unethical manipulation to pass emissions tests
8. The scandal raised increased awareness about the broader issue of emissions in diesel engines across automakers.	h. Industry-wide environmental concerns
9. The scandal illustrates the risks of prioritizing financial performance over ethical and environmental standards.	i. Financial penalties and operational costs
10. Independent testing revealed the discrepancy between lab and real-world emissions.	j. Leadership accountability consequences
11. VW implemented a strategic response including recalls, buybacks, and new compliance measures post-scandal.	k. Importance of independent verification
12. The scandal highlighted the need for stronger environmental regulations and compliance monitoring in the automotive industry.	l. False green marketing
13. VW established widespread impact by affecting millions of vehicles globally.	m. M. Global scale of scandal

**QUESTION 5:**

**14 MARKS**

Identify and explain three operational challenges that are unique to humanitarian logistics during disaster response. For each challenge, provide a specific example that illustrates how it impacts aid delivery or response effectiveness

**SUB-TOTAL: 50 MARKS**

**TOTAL: 100 MARKS**

**THE END**