



NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY
FACULTY OF MANAGEMENT SCIENCES
DEPARTMENT OF MARKETING AND LOGISTICS

QUALIFICATION: BACHELOR OF TRANSPORT MANAGEMENT	
QUALIFICATION CODE: 07BTMM	LEVEL: 6
COURSE CODE: SPI621S	COURSE NAME: TRANSPORT SAFETY PRACTICE AND INFRASTRUCTURE MANAGEMENT
SESSION: JANUARY 2019	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Ms. Ester Kalipi Ms. Elina Lumbu
MODERATOR:	Ms. Emilia Salomo

INSTRUCTIONS
<ol style="list-style-type: none">1. Answer ALL the questions.2. Write clearly and neatly.3. Number the answers clearly.4. This question paper consist of Section A and B.

THIS QUESTION PAPER CONSISTS 3 OF PAGES (Including this front page)

SECTION A: MULTIPLE CHOICE AND TRUE/FALSE QUESTIONS

(26 Marks)

Question 1

Write the letter next to the correct answer.

16 Marks

- 1.1. Transport safety data is required in order to _____ . (2 marks)
- a) Define problems
 - b) Identify risk factors, priorities
 - c) Formulate strategy
 - d) All of the above
- 1.2. The main aim of the _____ is to prevent fatal and severe injuries by recognizing and attending to the main engineering factors that contribute to them. (2 marks)
- a) Safe System Approach
 - b) Safe Management System
 - c) Accidents Prevention
 - d) Transport Safety Practice
- 1.3. The purposes of an accident investigation include: (2 marks)
- a) Operations and maintenance of transport infrastructure.
 - b) Traffic management, tolls collection, and installing correct signage.
 - c) To educate the transport users in a particular hazard and to direct attention to accident prevention within the community.
 - d) All of the above
- 1.4. One of the phases of accident investigation is: (2 marks)
- a) Event collection
 - b) Data collection
 - c) Data collection techniques
 - d) Hypothesis generalization
- 1.5. Most quality accidents reports are featured by one of following: (2 marks)
- a) Transport Safety Practice
 - b) Training and Education
 - c) Transport durability report
 - d) Factual information, example sequence of events
- 1.6. The principles to consider for sustainable transport network design includes: (2 marks)
- a) Responsibility
 - b) Permanence
 - c) All of the above
 - d) Performance
- 1.7. _____ is one of the elements that make up the rail infrastructures. (2 marks)
- a) Road works prior to paving
 - b) Mooring equipment and guide jetties
 - c) Track and track bed, including its drainage channels, lining walls, trenches, crossings, fencings and fire protection strips.
 - d) All of the above

- 1.8. Transportation safety has been built upon a _____ . (2 marks)
- a) Proactive approach
 - b) Reactive Approach
 - c) Predictive Approach
 - d) Segregation of Exposure

Sub-total: 16 Marks

Question 2

State whether the following statements are true or false: (2x5 = 10 Marks)

- 2.1. There are local and international modal sources of transport safety data, particularly on infrastructures development, vehicles, operations, traffic clashes and injuries, and economical analysis.
- 2.2. A data collection strategy must be developed to ensure that important data is gathered.
- 2.3. Operational activities – which entail tasks such as traffic management, tolls collection, and installing correct signage.
- 2.4. Contractors should not consider physical quality infrastructure that aims at providing a sound comfort and safety during travels, it is therefore important that contractors account for these aspects and that infrastructures are of sound physical quality.
- 2.5. Congestion and unproductive use of capacity is not one of the management challenges that are affecting operations and maintenance of transport infrastructure.

Sub-total: 10 Marks

SECTION B

(74 Marks)

Structured questions

Question 3

- 3.1. Discuss four principles of the safe system approach? 12 Marks
- 3.2. Name and explain three hazard identification methodologies? 9 Marks
- 3.3. National Road Safety Council (NRSC) of Namibia conducted an investigation on reoccurring road accidents in Namibia last year. The NRSC investigation team has suggest several mitigations approaches that can be implemented to prevent the accidents from happening again. NRSC needs your advice on which approach/method they should implement considering its chances of being successful. In your advice, discuss at least five factors that NRSC can assess to determine if a risk mitigation approach will be successful or not? 10 Marks

Sub-Total: 31 Marks

Question 4

- 4.1. Outline the benefits of transport infrastructure planning? 5 Marks
- 4.2. Describe any seven elements that make up airport infrastructures? 14 Marks

Sub-Total: 19 Marks

QUESTION 5

- 5.1. There are principles that stakeholders should pay particular attention when conducting accident investigations. Name and explain eight of these principles? 16 Marks
- 5.2. Analyse four errors/pitfalls that may occur during the data collection phase? 8 Marks

Sub-total: 24 Marks

Total: 100 Marks

THE END