



Road Traffic
Management Corporation

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**Occupational Certificate: Road Traffic
Safety Officer
SAQA ID: 101875**

**External Integrated Summative
Assessment**

Exemplar

QUESTION PAPER

August 2021

EXAMINER: SD Maboeane

MODERATOR: PH Plaatjies

EXTERNAL MODERATOR/S:

Duration: 3 hours

Total: 100

ROAD TRAFFIC MANAGEMENT CORPORATION

**OC: Road Traffic Safety Officer
External Integrated Summative Assessment**

SAQA ID: 101875

Exemplar

August 2021

Duration: 03 Hours

Paper Total: 100

Instructions to the Learners:

- This is a **closed book** assessment and covers all the Exit Level Outcomes of the qualification with SAQA ID:101875
- This paper consists of three (3) **Compulsory** sections
- Each Section addresses a separate Exit Level Outcome
- The duration of this assessment is **three (3) hours**, and the question paper is out of **100 marks**
- Write clearly and neatly with a **black pen** only; and
- All other instructions as provided for in the approved assessment answer script apply.

Section A: Design, develop and implement a road safety plan to promote safe road usage (Exit Level Outcome 1)

Question 1

- 1.1 Explain what a road safety plan, and remarks on the benefits thereof. (5)
- 1.2 List and explain the main elements of a road safety plan. (15)
- 1.3 Design and develop a road safety plan of your province/authority indicating the intervention(s) that you will put in place for a wide range of vulnerable road users. (10)
- 1.4 In November 1998, Tingvall, then working with the Monash University Accident Research Centre (MUARC) introduced his new paradigm for injury prevention, namely Vision Zero, at the Road Safety Research, Policing and Education conference in Wellington New Zealand.

However, prior to Tingvall's arrival, several researchers were already highlighting flaws and questioning the moral ethics of the road transport system. Job et al in 1989 noted that "*many fatalities occur not because of driver error but because of driver error combined with a negligent designed road system and a politically acceptable but technically substandard vehicle. Most of us would not condone a legal system which handed out the death penalty (or permanent disability) for "crimes" such as the misjudging of the camber of the road or driving when slightly drowsy, so we should not accept a politically determined traffic system which metes out such penalties*".

(Source: Mooren, *et al.*, 2011:2)

Taking the above excerpt into account, how will you implement a road safety plan towards to have a maximum/desired impact? Your discussion should refer to the principles of the Safe System Approach. (10)

Sub-Total= 40

Section B: Conduct a road related infrastructure audit/assessment (Exit Level Outcome 2)

Question 2

2.1 The professional engineers plan and design the roads in consultation with all relevant stakeholders to ensure that the expected outcomes as envisaged by the project owners are achieved.

Choose the correct combination of the outcomes of the road infrastructure: (1)

- A. Engage; Road design; Liveable communities; Safer roads.
- B. Safer roads; Efficient and effective transport; Fair access and amenity; Environmental management.
- C. Safer communities; Industry competitiveness and growth; Lovable communities; Environmental conservation.
- D. Drainage design; safer communities; Liveable communities; Efficient and effective transport.

2.2 The traffic safety officer will typically act as: (1)

Select one:

- A. Designer or as a road safety lead auditor
- B. Client or as a road safety audit team member.
- C. Observer or as a specialist advisor member
- D. Consultant or as a group leader

2.3 Forgiving roads depend on how the roadside is designed and equipped. However, the roadside is also a component of the driver's field of view, which governs the driver's behavior. a well-designed field of view helps enhance road safety. In other words, the roadside should forgive the driver his/her error by reducing the severity of run-off-road accidents.



Single or point objects placed within the clear zone can represent a hazard for a vehicle that is out of control and leaves the carriageway. Study the above images and identify three categories of common treatment solutions and two examples for each to make roadsides safer. (9)

2.4 The concept of Forgiving Roads has the objective of minimizing the consequences of driving errors, rather than preventing them. Identify three (3) categories of obstacles that may be found on roadsides and which may represent a risk to vehicle occupants in the event of a driver losing control of the vehicle and provide three (3) examples under each category. (9)

2.5 Compile a checklist or toolkit consisting of five items for use in conducting the road infrastructure audit. Hint, your checklist should contain an *Item*, *Criteria*, *Y/N*, *Remarks*. Each item should at least have one criterion as shown below. (10)

Item	Criteria	Yes	No
Road layout	Is the design consistent with the function of the road?	✓	
	Can vehicles safely use this road to maneuver, pass etc?		

2.6 By referring to the above compiled checklist, think of a public road within your vicinity and draft a road assessment report on how best it can be improved to be more 'self-forgiving'. (10)

Sub-Total= 40

Section C: Conduct research project and generate an abstract (Exit Level Outcome 3)

Question 3

3.1 Research projects have distinct characteristics depending on the complexity and duration of the project. List five such distinct characteristics. (5)

3.2 Read the following scenario and then answer the questions that follow:

A Road Safety Officer (RSO) from RTMC started to use interactive white board lessons during the grade 12 driving license education program at the local high school. She decided to determine how the Grade 12 learners experience the interactive whiteboard lessons. She compiled a Likert-Type/Scale questionnaire and approached the principal of the school and the district director for permission to conduct this study at her selected school. Once she has done this, she wrote a letter to the learners and to their parents in which she explained the project in detail.

In addition to the letter, she verbally explained the project to the learners. She also stressed that participation is voluntarily, that learners' identities will not be revealed when she writes up findings of her study, and that learners can withdraw from the project at any time if they so wish. She asked the learners to assent to participation and she asked their parents to consent. Both learners and parents signed assent/consent forms.

Forty-nine of the learners agreed to participate and returned the necessary forms. The Road Safety Officer met with these learners at a prearranged time after school and asked them to complete the questionnaire regarding the project.

3.2.1 Identify and explain the research design used in the scenario, use evidence from the scenario to substantiate your answer **(2)**

3.2.2. Which worldview is associated with this research design? **(1)**

3.2.3. Which strategy of inquiry is used in this study? **(2)**

3.2.4 Which method of data collection is used in this study? **(1)**

3.2.5 Formulate the aim for the research in the scenario. (2)

3.2.6 Formulate a research question for the research in the scenario (2)

3.2.7 Provide five ethical considerations that the road safety officer as a researcher adhered to. (5)

Sub-Total = 20

PAPER TOTAL = 100 Marks

QCTO APPROVED EXEMPLAR