higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

TRANSPORT ECONOMICS
NQF LEVEL 4

7 November 2022

This marking guideline consists of 6 pages.

Copyright reserved

SECTION A

QUESTION 1

1.1 D
1.2 B
1.3 B
1.4 D

(4 × 1) **[4]**

QUESTION 2

2.1 True
2.2 False
2.3 False
2.4 True

(4 × 1) **[4]**

QUESTION 3

3.1 C
3.2 A
3.3 E
3.4 B

(4 × 1) **[4]**

QUESTION 4

4.1 Market is a place or avenue through which people buy and sell goods and services.

4.2 Intermodal supply is the use of a number of modes of transport to carry goods from origin to destination.

4.3 Transport Income is the amount of money coming in from the transport services and goods on offer.

4.4 International trade is an exchange of products (goods) or services across national borders.

(4 × 2) **[8]**

TOTAL SECTION A: 20

SECTION B

QUESTION 5

5.1 The infrastructure level:✓
This is the physical and materially dense part of the transport supply system, namely roads, railways, airports, ✓✓

The infostructure level:✓
This level aims to ensure optimum use of the first level and is developing rapidly.
It includes all the systems and bodies that enable the use of transport infrastructure, for example the metro police who controls traffic, air traffic control systems, signalling systems on the rail network and the coordination of robots (traffic lights) in urban areas.✓✓

The service level:✓
This is the level of supply that encompasses the purchase of the transport supply✓ by consumers to meet their transport demand. ✓ (Any 2 × 3) (6)

5.2
- Total cost curve
- Marginal cost curve
- Average cost curve (3)

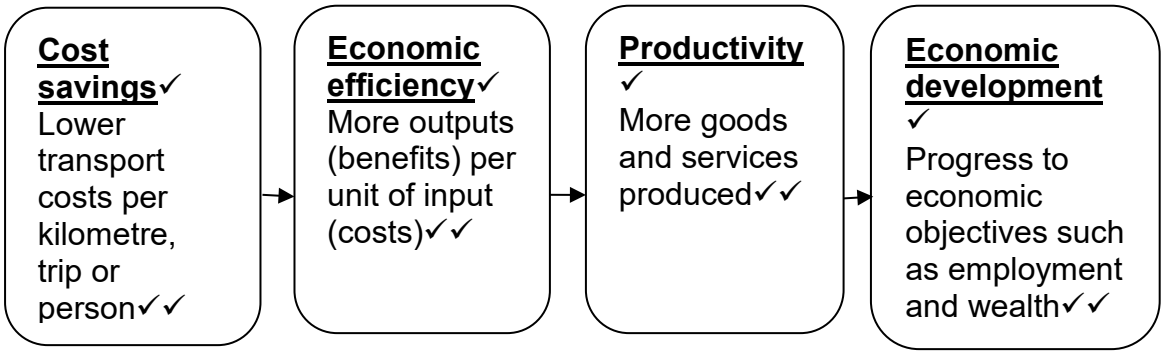
5.3

Conditions affecting transport costs	Factors
• Geography✓	• Distance, physiography, accessibility
• Type of product✓	• Packaging, weight, perishability
• Economies of scale	• Shipment size
• Energy	• Energy needed to run transport services, rising energy prices cause increase in transport prices
• Trade imbalance	• Empty travel
• Infrastructure	• Capacity, limitations, operational conditions
• Mode	• Capacity, limitations, operational conditions
• Competition and regulation	• Tariffs, restrictions, safety, ownership

(Any other relevant answers 2 × 2) (4)

5.4
- Technical regulation
- Social regulation
- Economic regulation (Any other relevant answers 3 × 1) (3)

5.5



(3 × 4) (12)
[28]

QUESTION 6

6.1
- Transport service providers may lower the price of their transport service to encourage more travel or to attract consumers from other modes.
- Transport service providers can improve the quality of the transport service in that mode by improving the frequency, reliability, comfort, service area coverage and speed of service. (Any other relevant answers 2 × 2) (4)

6.2
- Urbanisation is increasing the demand for daily travel.
- The number of people owning cars increased most rapidly in the Western Cape and Gauteng.
- Smaller average household sizes led to fewer household trips being made in 2003 than in the mid-1990s.
- We see the greatest changes in modal choice in increased car ownership, longer travel times, and population growth in South Africa's metropolitan areas. (Any other relevant answers 4 × 2) (8)

6.3
- Bulk carriers
- Passenger vessels
- General cargo ships
- Roll-on/Roll-off (Ro-Ro) ships (Any 3 × 1) (3)

6.4
- How many passenger trips are taken
- The final destination of trips
- Modes and routes chosen
- The type of transport vehicle used
- Where vehicles will be parked and for how long
- Types of transport services used (Any 5 × 1) (5)

6.5

Limitations of rail	Products rail supply
• Accessibility✓ • Inconsistent service✓ • Damage rates✓ • Vandalism of infrastructure	• Coal✓ • Lumber (timber)/Paper✓ • Grain • Chemicals

(Any other relevant answers 5 × 1) (5)

6.6

Modes	Fixed costs	Variable costs
Pipeline	Highest✓ (right-of-way, construction, pumping capacity)	Lowest✓ (no significance labour costs)
Air	Lowest✓ (aeroplanes and cargo systems)	High✓ (labour, maintenance, fuel)

(Any other relevant answers 4 × 1) (4)
[29]

TOTAL SECTION B: 57

SECTION C

QUESTION 7

7.1 7.1.1 Means all the strategies that the government, municipal councils and organisations use to manage traffic. (2)

7.1.2
- Ensure cost-effective travel
- Ensure the efficient movement of people and goods
- Make other transport modes, such as cycling and walking, more attractive options
- Encourage people to use transportation and modes in a way that can be sustained
- Keep road users safe on the roads
- Improve the quality of life for all road users and residents living in the area
- Keep the traffic moving
- Promote more efficient modes of transport
- Improve the local environment
- Ease pressure on the environment

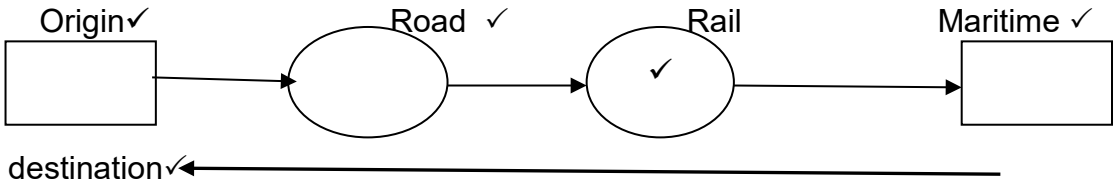
(Any other relevant answers 2 × 2) (4)

7.2
- Toll roads at fixed rates
- Congestion pricing at variable rates
- Cordon fees
- High-capacity toll lanes
- Distance-based fees
- Pay-as-you-drive insurance (Any 3 × 1) (3)

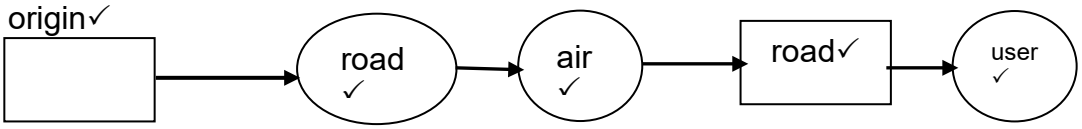
7.3
- Different modes of transportation may offer a more efficient and faster transport service.
- The transport service may be cheaper or offered at a lower cost by using different modes of transportation across different areas and terrains.
- Transport consumers can take advantage of the best service and performance characteristics of the different modes of transportation.

(2 × 3) (6)

7.4



or



A product is being exported by road to a railway station/airport.✓ From there, it can be sent by train to a port or by road, where it is loaded on a ship,✓ to be exported to another country or sent to the user ✓

(1 × 8) (8)
[23]

TOTAL SECTION C: 23
GRAND TOTAL: 100

Copyright reserved