higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

TRANSPORT OPERATIONS

NQF LEVEL 4

(11020334)

20 November 2019 (X-Paper)
09:00–12:00

This question paper consists of 8 pages.

Copyright reserved

TIME: 3 HOURS
MARKS: 150

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Start each section on a NEW page.
5. Use only blue or black ink.
6. Write neatly and legibly.

Copyright reserved

SECTION A

QUESTION 1

Various options are given as possible answers to the following questions. Choose the correct answer and write only the letter (A–D) next to the question number (1.1–1.10) in the ANSWER BOOK.

1.1 It can be described as the collection of ideas which set forth the general rules on how to manage business or organisation:

A Planning
B Management theory
C Transportation
D Management

1.2 What is the legal overall length of an articulated vehicle with an abnormal load?

A 18,5 m
B 2,6 m
C 4,3 m
D 22,0 m

1.3 What does the following international standardised mark symbolise?



A Sling here
B Use no hooks
C Clamp here
D Do NOT destroy barrier

1.4 Objective of transport management is to…

A promote growth of the economy.
B emphasise the purpose of the organisation.
C provide safe, reliable transport.
D monitor and control assets utilisation.

1.5 Transportation costs include

A Production costs
B Warehousing costs
C Vehicle depreciation
D Marketing costs

Copyright reserved

1.6 A transport business must register for:

A Income tax
B Transport needs
C Depreciation
D Maintenance costs

1.7 Costs that remains the same irrespective of the usage of a vehicle in a transport business:

A Direct cost
B Time-related costs
C Unit costs
D Distance-related costs

1.8 The NRTR requires a vehicle or combination to have a ground clearance of not less than … under laden mass conditions.

A 120 mm
B 115 mm
C 175 mm
D 150 mm

1.9 Transportation scheduling involves:

A The ability to change the volume of production
B Developing the company to ensure growth
C Determining the transport needs
D Ordering parts and materials

1.10 The maximum speed for an abnormal vehicle on public roads is dependent on:

A The distance to travel
B Delivery windows
C Load on tyres
D Customer expectations

(10 × 1) **[10]**

QUESTION 2

Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (2.1–2.5) in the ANSWER BOOK.

2.1 A distribution centre is a warehouse that is specifically designed for storage.

2.2 An escort vehicle should drive ahead of any abnormal vehicle and be out of sight.

2.3 Policies are related activities that produce a specific service or product.

2.4 Dangerous goods are materials or items with hazardous properties.

2.5 Transportation of dangerous goods via different mode requires ordinary vehicles and drivers.

(5 × 1) **[5]**

QUESTION 3

Choose a term from COLUMN B that matches a description in COLUMN A. Write only the letter (A–G) next to the question number (3.1–3.5) in the ANSWER BOOK.

COLUMN A		COLUMN B	
3.1	Used to describe the specific instructions necessary to perform a task	A	service cost
3.2	A fixed printed sign for public display	B	route scheduling
3.3	A fixed amount charged for services delivered	C	procedures
3.4	Expenses associated with having another person perform a valuable task for which specialised expertise may be required	D	rates
3.5	The process of assigning an arrival and service time for each stop	E	placards
		F	planning
		G	direct cost

(5 × 1) **[5]**

QUESTION 4

Give ONE word or term for each of the following descriptions. Write only the word or term next to the question number (4.1–4.2) in the ANSWER BOOK.

4.1 Planning, designing, delivering, operating and reviewing of transport, whilst balancing the needs of the environment and the economy at large

4.2 A vital hub in the flow of goods within a supply chain system

4.3 Inter-provincial, cross-border permits issued by one province on behalf of other provinces affected by the same abnormal load trip

4.4 A plan to manage emergency response procedures to spills and disasters in a business

4.5 A physical distribution channel that often includes the manufacturer and another delivery service, but it bypasses retail stores

(5 × 2) **[10]**

TOTAL SECTION A: 30

SECTION B

QUESTION 5

5.1 List any FOUR modes of transport (4)

5.2 Using a pyramid structure, draw an organisational chart to illustrate the relationship between management and the various operations within a transport business. Along your vertical axis, show Top, Middle and first-line management. On your horizontal axis, show THREE responsibility areas (departments). Label your diagram. (9 × 1) (9)

5.3 Describe THREE factors that influence the selection of a mode of transport. (3 × 2) (6)

5.4 Explain any FOUR general rules that should be considered when routing vehicles. (4 × 2) (8)

5.5 List FOUR company types that one can chose from to start a business. (4)

[31]

QUESTION 6

6.1 Describe THREE distribution channel objectives to consider for cost-effective distribution of goods. (3 × 2) (6)

6.2 Differentiate between *upstream* and *downstream* production costs and give ONE example in each case. (7)

6.3 Describe TWO characteristics of products that may influence the cost of transporting those products. (2 × 2) (4)

[17]

Copyright reserved

QUESTION 7

Study the image below and answer the questions.



South Africa's largest road freight truck travels on a road near Johannesburg. The wide load lorry's freight carrier is 10,1 metres wide and 5,4 metres high. The vehicle in total is 13 metres long and weighs 85 tons.

[Picture: *Gallo Images/Rex Features*]

7.1 Give ONE word to describe the type of load in the picture above. (1)

7.2 Name TWO types of escorts used to mitigate the risks associated with the transportation of the type of load described in 7.1. (2)

7.3 Differentiate between a trip permit and a route-period permit in the conveyance of this type of load. (5)

7.4 Consider the picture above:

List and discuss THREE markings required to ensure this load is transported in accordance with legislative requirements. (3 × 4) (12)

7.5 Discuss any FIVE challenges brought about by the movement of this type of load on public roads. (5 × 2) (10)

[30]

QUESTION 8

8.1 Describe FIVE guidelines to comply with the NRTA and the Hazardous Substances Act when moving dangerous goods above the exempt quantity. (5 × 2) (10)

8.2 Discuss FOUR items that should be included, according to the NRTR, in the syllabus for the training of drivers. (4 × 2) (8)

8.3 Explain how proactive or active monitoring works as a workplace safety measure. (3)

8.4 Describe the following types of dangerous and hazardous goods and give one example in each case.

8.4.1 Dangerous when wet

8.4.2 Organic peroxides

8.4.3 Infectious substance

(3 × 3) (9)

8.5



Explain briefly how the upper half and lower half of hazard labels are used to convey information. (2 × 2) (4)

8.6 Re-arrange the terms of the lifecycle of waste management in descending order of priority.

recovery; reuse; waste avoidance and reduction; treatment and disposal, recycling

(5 × 1) (5)

8.7 Name THREE international governing principles for the management of hazardous waste. (3)

[42]

TOTAL SECTION B: 120
GRAND TOTAL: 150

Copyright reserved