

MODULE

TRANSPORT ECONOMICS 1B

CODE

VVR1B01

DATE

NOVEMBER EXAM

DURATION 2 HOURS

TOTAL MARKS 100

EXAMINERS : MR L JACOBS

MODERATOR : MR G HEYNS

NUMBER OF PAGES 5

INSTRUCTIONS TO CANDIDATES:

PLEASE ANSWER ALL THE QUESTIONS. QUESTION PAPERS MUST BE HANDED IN.

SECTION B

(30 marks)

Question 1

Read the below case study and answer the questions that follows:

Case Study: The Port of Saldanha

Saldanha is a little town on the West Coast of South Africa. It has a Port that is used for the export of iron ore exports mainly. The ore is trucked from the mine to the port by a total of about 342 wagons that are pulled by three locomotives over a distance of just over 900 kilometres. South Africa has high quality ore and although the country is a small player in the global market compared to countries like Australia and China. Who are experting volumes way over 150 million metric tons per year. The country's abundant mining reserves make it imperative for it to invest in the relevant port infrastructure to ensure that it benefits from the exports. From exporting 26 million tons per year in previous years, the volumes have now been increased to just over 50 million tons. With the intended expansion it is envisaged that the port will do just over 80 million tons leading to a growth of about 100 vessels calling at the port to 200 per year. All the expansion came at a cost of about R950 million and it is envisaged that the next phase will need about R650 million. Albeit slow this investment will bring along a number of benefits to the region as well as the country in socio-economic terms.

- 1.1 Considering the total sum investment needed, mention three different ways the port can raise the capital needed. (6)
- 1.2 Where will the port be getting income from to ensure a return of investment from? (4)
- 1.3 Assuming something where to go wrong on the line and road transport has to be used with 35t tippers:
 - How many trips will be needed to deliver 10 000 tons in total? (5)
 - Calculate the total number of kilometres covered, based on the number of trips above and the rail distance to and from the port?
- 1.4 Is the above a move worth considering for any company? (Yes or No) Provide 3 reasons why (4)
- 1.5 There are no toll gates from the Northern Cape to Saldanha. What would the 4 biggest road transport operational expenses be?
- 1.6 Excluding all expenses what is the lowest amount to charge per kilometre for a return trip to move 10 000tons before adding other costs?

SECTION C

Question 5

(10 marks)

Discus the characteristics of a good vehicle replacement policy for a fleet operator?

Question 6

(5 marks)

Describe the term refurbishment. Which vehicle parts are normally refurbished?

Question 7

(4 marks)

Define vahicle maintenance and also mention two types of maintenance.

Question 8

(6 marks)

Briefly mention 3 ways how a petrol workers strike will affect the road freight transport industry.

Question 9

(5 marks)

State if the following is true or false:

- a) Tyres form part of the 3 biggest expenses in vehicle operations
- b) New vehicles can result in large cost savings despite their high costs
- c) Depreciation means that the vehicle value increases over time
- d) Drag is caused by a lack of zerodynamic features and can lower fuel consumption.
- e) Warranties last for the entire vehicle life.

Question 10

(10 marks)

Discuss the roles and functions of the Road transport Management System.

0000000000000