

FACULTY/COLLEGE	College of Business and Economics
SCHOOL	School of Management
DEPARTMENT	Transport and Supply Chain Management
CAMPUS(ES)	АРК
MODULE NAME	Transport Economics 1B
MODULE CODE	TRE21B1
SEMESTER	Second
ASSESSMENT OPPORTUNITY,	Supplementary Exam
MONTH AND YEAR	January 2021

ASSESSMENT DATE	21 Jan 2021	SESSION	08:00
ASSESSOR(S)	Mr L Jacobs		
MODERATOR(S)	Dr J Mageto		
DURATION	2 hours (120 min)	TOTAL MARKS	80

NUMBER OF PAGES OF PAPER (Including cover page)	8
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### **INFORMATION/INSTRUCTIONS:**

- This is a closed-book assessment.
- Answer all the questions.
- Read the questions carefully and answer only what is required.
- Number your answers clearly and correctly as per the question paper.
- Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.

### SECTION A

#### QUESTION 1

#### (30 Marks)

- Distribution in transport means the "movement" of ...... from place-of-origin to destination:
  A. Equipment and vehicles
  - B. Substitute products
  - C. People or goods
  - D. Recurring orders
  - E. Powerful individuals
- 2. The acronym CLM stand for.....:
  - A. Council for Logistics Management
  - B. Council for Local Municipality
  - C. Council for Legal Managers
  - D. Councils for Line Managers
  - E. Council for Legislative Monitoring
- 3. The rate at which the .....changes in response to changes in any of the determining factors is known as the elasticity of the demand for transport:
  - A. Transport offered
  - B. Road transport
  - C. Transport Monitoring
  - D. Shipping
  - E. Transport quantity demanded
- 4. The flow of goods at macro (society) or micro (firm) level refers to.....respectively:
  - A. Society and firm
  - B. Producer and supplier
  - C. Manufacturer and seller
  - D. Trader and producer
  - E. Seller and buyer
- 5. The ...... and operation thereof lies at the heart of an economical transport service:
  - A. Incorrect selection of vehicles
  - B. Low and short term in returns of vehicles
  - C. Correct selection of vehicles
  - D. Low and average in returns of vehicles
  - E. Hi and average returns of vehicles
- 6. Before selecting vehicles for purchase it is necessary to arrive at a specification of the operation and the ......required.
  - A. Fuel
  - B. Payments
  - C. Maintenance
  - D. Body
  - E. Technical characteristics
- 7. Toxic products that are transported by road can be.....:
  - A. Mixed with most products
  - B. Liquid or solid
  - C. Stored in the same containers with edible products
  - D. Loaded on top of flammable products
  - E. Delivered without relevant papers

- 8. Government deals with road transport mainly through......:
  - A. Availability
  - B. Accessibility
  - C. Liberalization
  - D. Activities
  - E. Legislation

9. Speed, safety, and reliability form part of the.....characteristic of transport.

- A. Qualitative
- B. Quantitative
- C. Demographic
- D. Automatic
- E. Manual
- 10. When doing a vehicle specification exercise the starting point is a thorough operational analysis that must be included in the.....
  - A. Vehicle route
  - B. Vehicle tyres
  - C. Vehicle capacity
  - D. Vehicle model
  - E. Vehicle design
- 11. A vehicle can lose power due to high temperatures as well as......
  - A. High altitude
  - B. Light loads
  - C. Accurate packing
  - D. Level road surfaces
  - E. Low volume cargo
- 12. The acronym GVM stands for:
  - A. Government
  - B. Greater Vehicle Monitoring
  - C. Gross Vehicle Mass
  - D. General Vehicle Model
  - E. Granted Vehicle Make
- 13. The income of people will affect their perception of the .....of transport.
  - A. Optimal Supply
  - B. An empty load
  - C. Increased demand
  - D. Market instability
  - E. Cost and service qualities
- 14. The gross mass of a vehicle is a combination of its......
  - A. Load and trailer
  - B. Tyres and truck tractor
  - C. Engine and gearbox
  - D. Truck tractor plus semi-trailer.
  - E. Make and model

#### 15. Urban transport provision is largely the role of:

- A. Local authorities
- B. Citizens.
- C. International governments
- D. Politicians

- 16. To.....into road transport, qualitative and quantitative measures can be implemented.
  - A. Minimize entry
  - B. Optimize entry
  - C. Deny entry
  - D. Maximize entry
  - E. Analyse entry
- 17. Identify one of the following that is not a power requirement of a vehicle to operate in specific operating conditions:
  - A. Management
  - B. Routes
  - C. Gradients
  - D. Road surfaces
  - E. Speed

18. .....is the greatest variable expense item in the operation of a vehicle:

- A. Fuel
- B. Tyres
- C. Insurance
- D. Maintenance
- E. Overtime
- 19. .....is a managerial task can be described as the conditioning or influencing of the behaviour of the driver to promote the attainment of prescribed objectives.
  - A. Recognition
  - B. Modelling
  - C. Disciplining
  - D. Praising
  - E. Motivation
- 20. Other facilities that impose road charges are:
  - A. Port terminals
  - B. Airports
  - C. Airports and Ports
  - D. Train stations
  - E. Toll Gates
- 21. Urban transport provision is largely the role of:
  - A. Local authorities
  - B. Citizens
  - C. International governments
  - D. Politicians
  - E. Road transport companies
- 22. Vehicle details are formalised onto a vehicle description sheet so that the vehicle suppliers may use it as a basis for ......
  - A. Finance
  - B. Marketing
  - C. Promotions
  - D. Sales
  - E. Quotations

- 23. The addition of extra fuel tanks, as well as lifting equipment is known as.....:
  - A. Local equipment
  - B. Increased equipment
  - C. Extra equipment
  - D. Ancillary equipment
  - E. Added equipment

24. ..... refers to how often a transport service is provided.

- A. Delays
- B. Adequacy
- C. Freelancing
- D. Frequency
- E. Dereliction
- 25. If the organization structure is to be based on future as well as current operations of the firm, it must bear some relationship to ......:
  - A. Long term objectives
  - B. Short term objectives
  - C. Medium-long term objectives
  - D. Medium-term objectives
  - E. Short-long term objectives
- 26. Regularity applied to transport service means that the movements are either at evenly spaced intervals or ......
  - A. At unknown times
  - B. At unconfirmed times
  - C. At reliable times
  - D. At pre-confirmed times
  - E. At known times
- 27. To achieve a cost-effective operation means to ensure a minimum cost burden on the.....
  - A. Service only
  - B. Product or service price
  - C. Price only
  - D. Product only
  - E. Management
- 28. Two major issues currently dominating the South African road transport industry is.....
  - A. Driver training and accidents
  - B. Roads and Administration
  - C. Vehicle preparedness and Management
  - D. Delivery times and dates
  - E. Maintenance and remuneration
- 29. Aerodynamics contribute to the ..... of the vehicle:
  - A. Delivery schedule
  - B. Engine capacity
  - C. Vehicle power
  - D. Fuel economy
  - E. Manoeuvrability

- 30. Road freight transport is a major contributor to the ......of South Africa.
  - A. Politics
  - B. Economy
  - C. Gateways
  - D. Train stations
  - E. Financial institutions

# SECTION B & C

## Hijacks, riots and rising costs – road freight in South Africa is 'on its knees'

A technical recession with a third-quarter GDP drop of 2%, and lockdown restrictions passing the 100-day mark, have hit South Africa's already pressured freight forwarding market.

The sector is gripped by cross-border truck congestion, increasing cargo hijacks, riots and protests, mounting storage and demurrage costs on imports and slower freight clearance. Last month, the South African Association of Freight Forwarders estimated that local importers were facing around ZAR1.4bn (\$85m) in storage and demurrage costs accumulated during level-5 lockdown, with more than 20 000 containers piling up in storage facilities.

And reports emerged of queues of up to 13km along the 'chrome corridor' between Steelpoort and Maputo, with as many as 370 trucks waiting to cross the border and South African authorities processing the backlog in increments of only 4km a day. Marcus Ellappan, director of road freight for Bidvest International Logistics (BIL), pulled no punches, describing road freight in the country as "on its knees".

"There's a regional imbalance of freight due to the decline in the economy, which means hauliers are battling to generate revenue, let alone operate profitably, especially on return loads. "Protests by truck drivers against the hiring of foreign nationals are impacting the utilisation of assets, which also hits profitability. Some hauliers are now downsizing fleets as trucks stand idle – and with that, jobs are being lost."

He added: "Complying with Covid-19 protocols has negatively impacted the costs of doing business, and often these costs aren't recoverable." This comes on top of an increasing number of personal protective equipment (PPE) consignments being hijacked on the road or becoming a hot commodity for thieves at airports. In March, the Transport Asset Protection Association (TAPA) said South Africa was the top spot in 2019 for high-value cargo theft, with a staggering figure of ZAR367m worth of cargo stolen, a 195% increase on the year before.

And, said Mr Ellappan: "There's an increasing risk of injury to drivers." He added: "With human capital costs varying between 30% and 40%, many industry players are reducing staff headcounts. But they're also reducing the sizes of their truck fleets so that they can inject cash back into their businesses to stay alive."

Companies were also leveraging technology more, he said, to simplify how they do business and save on costs. Adaptability as a means of survival, let alone a point of competitive advantage, isn't something new for business. As early as July 2011, a report by the *Harvard Business Review* (*HBR*) highlighted the increasing need for organisations to adapt, especially in an age of risk and instability. And, in November last year, *HBR* again published a piece on why agility and innovation as a means of adapting had become so important.

"Our business continuity plans have been adjusted to enable us to operate through these turbulent times," said Mr Ellappan, "and technology has enabled us to operate more responsively while maintaining a good degree of flexibility."With plans in place to announce an adjusted road freight service offering, Mr Ellappan believes BIL's road freight division will be well-positioned to offer faster and stronger supply chain support, especially where customers' cost of doing business is concerned.

**Source**: Craig Dummett Bidvest International Logistics 22/07/2020

QUESTIONS 30 I	marks
1.1 Provide the full name of the acronym GDP as well as the definition thereof.	(3)
1.2 Provide any three reasons why there are problems of violence against truck driver	rs. (6)
1.3 Efficiency is part of transport management objectives to improve the total transport system. Discuss any three such objectives through which this can be achieved.	rt (6)
1.4 Provide your own view on the importance or non-importance of communication between employers and employees in this current situation.	(2)
1.5 Which technologies can be used to monitor and better control the following:	(3)
1.6 Other than legislation, discuss any three different ways through which governmen assist to resolve the problems faced by the trucking industry.	t can (6)
1.7 Mention and discuss the two most important types of insurance that the companie involved must have for the problems discussed in the case.	es (4)
SECTION C	
QUESTION 3	20 Marks

3.1	Discuss any five of the most important considerations a company seeking finance must consider when approaching capital investments.	(10)
3.4	Provide any five (5) cost components of a road transport operation. (5)	(5)
3.5	Identify any five (5) elements that form part of a job description	(5)