



QUALIFICATION : B COM HONOURS
MODULE : ROAD TRANSPORT COSTING & DISTRIBUTION
CODE : TRE8X10
DATE : SUPPLEMENTARY EXAMINATION
DURATION : 180 MINUTES
TIME : 08:00
TOTAL MARKS : 180

EXAMINER(S) : PROF GP PRINSLOO
(EXTERNAL) MODERATOR(S) : MR H LEMMER
NUMBER OF PAGES : 4 PAGES

INSTRUCTIONS TO CANDIDATES:

- Question papers must be handed in.
 - Answer questions as per instructions
 - This is a closed book assessment.
 - Read the questions carefully and answer only what is asked.
 - Number your answers clearly.
 - Write neatly and legibly
 - Structure your answers by using appropriate headings and sub-headings.
 - The general University of Johannesburg policies, procedures and rules pertaining to written assessments apply to this assessment.
 - Please answer all questions.
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QUESTION 1**(10 Marks)**

Complete the "*Vehicle Concepts*" description where required in your examination script (NOT ON QUESTION PAPER)

QUESTION 2**(40 Marks)**

Complete the attached "*Vehicle Cost Schedule*". (The use of calculators is permitted)

QUESTIONS 3**(10 Marks)**

Give formulae/calculation description for the following cost concepts.

1. Cost of Capital
2. Depreciation per annum
3. Vehicle insurance
4. License fees
5. Fuel
6. Lubricants
7. Annual Maintenance
8. CPK for License fees
9. Total Annual Cost
10. CPK tyres

QUESTION 4**(30 Marks)**

A changing business environment is common for the Road Freight Transport industry. Analyse the impact of the changing business environment on management accounting in the Road Freight Transport industry.

QUESTION 5**(20 Marks)**

Various cost concepts are utilised within the Road Freight Transport industry. You are required to explain:

- a. Relevant and irrelevant costs and revenues.
- b. Avoidable and unavoidable costs.
- c. Sunk costs
- d. Opportunity costs.

QUESTION 6**(25 Marks)**

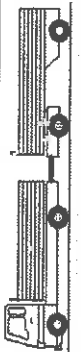
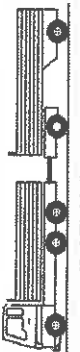
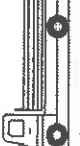
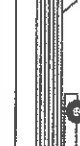
Analyse the two stage process for a traditional costing system.

QUESTION 7**(25 Marks)**

Examine the multiple functions of budgets in a Road Freight Transport organisation.

QUESTION 8**(20 Marks)**

Budgeting has been subjected to criticisms relating to the annual budgeting process. Evaluate this statement in practice.

VEHICLE CONCEPTS				Page C1	
01	 (2400 kg or Less)	Permissible Unladen PAYLOAD up to 2 400 1 400 1 000	12	 (4x2 Rigid+2 Axle Trailer)	Permissible Unladen PAYLOAD up to 28 000 11 400 16 600
02	 (2400 to 5000 kg)	Permissible Unladen PAYLOAD up to 5 000 2 680 2 320	13	 (6x4 Rigid+2 Axle Trailer)	Permissible Unladen PAYLOAD up to 43 000 15 780 27 220
03	 (5001 to 7500 kg)	Permissible Unladen PAYLOAD up to 7 000 3 100 3 900	14	 (6x4 Rigid+4 Axle Trailer)	Permissible Unladen PAYLOAD up to 55 200 19 680 35 520
04	 (7501 to 10000 kg)	Permissible Unladen PAYLOAD up to 10 000 4 210 5 780	15	 (Doubles Combination)	Permissible Unladen PAYLOAD up to 43 000 17 150 25 850
05		Permissible Unladen PAYLOAD up to 13 700 5 610 8 090	16	 (Concept 08+2 Axle Tris)	Permissible Unladen PAYLOAD up to 44 000 19 550 24 450
06		Permissible Unladen PAYLOAD up to 24 000 8 860 15 340	17	 (4x2 TT+2 Axle Trailer)	Permissible Unladen PAYLOAD up to 56 000 21 730 34 270
07	 (4x2 TT+Single Axle ST)	Permissible Unladen PAYLOAD up to 25 000 10 720 14 280	18	 (6x4 TT+Tandem/Tandem ST)	Permissible Unladen PAYLOAD up to 56 000 22 125 33 875
08	 (4x2 TT+Tandem Axle ST)	Permissible Unladen PAYLOAD up to 34 000 14 440 19 560	19	 (6x4 TT+Tandem/Tandem ST)	Permissible Unladen PAYLOAD up to 56 000 23 180 32 820
09	 (6x4 TT+Tandem Axle ST)	Permissible Unladen PAYLOAD up to 43 000 16 390 26 610	20	 (4x2 Rigid)	Permissible Unladen PAYLOAD up to 13 700 5 390 8 310
10	 (4x2 TT+Tandem Axle ST)	Permissible Unladen PAYLOAD up to 40 000 15 420 24 580	21	 (Four Axle Artic (4x2 TT+Tandem Axle ST))	Permissible Unladen PAYLOAD up to 34 000 13 650 20 350
11	 (6x4 TT+Tandem Axle ST)	Permissible Unladen PAYLOAD up to 49 500 17 520 31 980	22	 (Doubles Combination)	Permissible Unladen PAYLOAD up to 43 000 18 350 24 650

QUESTION 2

13		RFA VEHICLE COST SCHEDULE				Edition 53	
Concept - 13 Five Axle Combination 6x4 Rigid+2 Axle Trailer DROPSIDE Body						ASSUMPTIONS - Concept - 13 Five Axle Combination 6x4 Rigid+2 Axle Trailer DROPSIDE Body Apr-16	
ANNUAL FIXED (STANDING) COSTS		R	opk	%	%		
Cost of Capital (Finance)	89 596						
Depreciation	177 364						
Insurance							
On Vehicle Staff	424 166	543.8		41.2%	22.3%		
Overheads - Administration							
Overheads - Operational							
Licence	24 516						
Other	0	0.0		0.0%	0.0%		
TOTAL ANNUAL FIXED COSTS	1 029 794	1 320.2		100.0%	54.1%		
VARIABLE (RUNNING) COSTS		R	opk	%	%		
Fuel	436 910						
Lubricants							
Maintenance	259 540						
Tyres	166 490						
Other	0	0.0		0.0%	0.0%		
TOTAL VARIABLE COSTS	872 863	1 119.1		100.0%	45.9%		
TOTAL ANNUAL COSTS	1 902 657	2 439.3			100.0%		

COST SUMMARY		From Total Annual		
		Fixed Cost	Variable Cost	Total Cost
Cost per Day	R			
Cost per Hour	R			
Cent / Ton . km		92.4	78.3	170.7
At 70.0% Payload Utilisation and 75.0% Annual Laden km				

INDICES and INCREASES	INDICES	INCREASES
	RFA 20 Base Mar 99 = 1000	From Edition RFA 52
Total Annual Fixed Cost	3151	8.2%
Finance + Depreciation	1899	9.5%
On Vehicle Staff	4380	9.0%
Total Variable Cost	5781	0.2%
Fuel Cost	5178	-3.7%
Maintenance Cost	6179	4.0%

% INCREASE / DECREASE	Annual From Edition RFA 51	Previous From Edition RFA 52
Total Annual Fixed Cost	8.4%	8.2%
Total Variable cost - Incl Fuel & Oil	0.0%	0.2%
Total Variable cost - Excl Fuel & Oil	7.3%	4.6%
Total Annual Cost - Incl Fuel & Oil	4.3%	4.4%
Total Annual Cost - Excl Fuel & Oil	8.0%	7.1%

PRIME MOVER OR RIGID			
Cost Price (excl VAT)	R		1 288 621
Residual Value	%		25.0%
Finance - Cost of Capital (Interest)	%		10.5%
- or Monthly Repayment	R		0
Depreciation - Distance k	0	or	Time yrs
Insurance (% of Cost Price)	%		5.0
Tare	10 580	kg	Licence R
Number of Steering Axle(s)	no		1
Number of Tyres (excl spare)	no		10
Tyre Size	-		5/80R22.5
Tyre Price - New Tyre (excl VAT)	R		20 616
- Retread (excl VAT)	R		2 955
New Tyre Life - Front & Rear	80 000	km	100 000
Retread Tyre Life - Front & Rear	80 000	km	100 000
Number of Retreads - Front & Rear	0.0	no	2.0

TRAILERS OR SEMI TRAILERS			
Cost Price (excl VAT) (1st + 2nd Trailer)	R		417 962
Residual Value	%		0.0%
Finance - Cost of Capital (Interest)	%		10.5%
- or Monthly Repayment	R		0
Depreciation - Time	%		10.0
Insurance (% of Cost Price)	%		5.0%
Tare - First Trailer	5 200	kg	Licence R
Tare - Second Trailer	0	kg	Licence R
Number of Axle(s)	no		2
Number of Tyres (excl spares)	no		8
Tyre Size	-		5/80R22.5
Tyre Price - New Tyre (excl VAT)	R		20 616
- Retread (excl VAT)	R		2 686
New tyre life	km		120 000
Retread tyre life	km		120 000
Number of Retreads	no		2.0

ON VEHICLE STAFF			
Drivers - No & Monthly Cost	no	1	R 25 585
Assistants - No & Monthly Cost	no	1	R 9 762

ANNUAL FIXED OVERHEADS			
Administration	R		117 964
Operational	R		78 643
Other Fixed Standing Costs	R		0

VARIABLE COSTS			
Fuel Consumption	Litres / 100 km		53.0
Fuel Price	Cent / Litre		1 056.9
Lubricants (as % of fuel cost)	%		2.5%
Maintenance	opk		331.5
Other Variable Running Costs	opk		0.0

UTILISATION			
Annual Kilometres	km		78 000
Payload Utilisation & Annual Laden km	%	70.0%	%
Days Worked per Annum	days		225
Chargeable Hours per Work Day	hrs		12.0

13-5 Axle Comb

Average Payload 27.2 Ton