

FACULTY/COLLEGE	College of Business and Economics
SCHOOL	Johannesburg Business School
DEPARTMENT	Transport and Supply Chain Management
CAMPUS(ES)	АРК
MODULE NAME	Road Transport Costing and Distribution
MODULE CODE	TRE8X10
SEMESTER	Second
ASSESSMENT OPPORTUNITY MONTH AND YEAR	Supplementary Summative Assessment Opportunity January 2020

ASSESSMENT DATE	January 2020	SESSION				
ASSESSOR(S)	Prof. G.C. Prinsloo					
MODERATOR(S)	Mr JA van Rensburg					
DURATION	3 hours (180 min)	TOTAL MARKS	180			

NUMBER OF PAGES OF QUESTION PAPER (Including cover page)

4

INFORMATION/INSTRUCTIONS:

- Answer all questions
- Question papers must be handed in.
- This is a closed-book assessment.
- Read the questions carefully and answer only what is asked.
- 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.

QUESTION 1

List sequentially and complete the "Vehicle Concepts" description where required in your examination script. (NOT ON QUESTION PAPER). See page 3 of this examination paper.

QUESTION 2

Complete the attached "Vehicles Cost Schedule" (The use of calculators is permitted). See page 4 of this examination paper.

Complete on question paper (remember to mark with Student number).

QUESTION 3

Give formulae description for the following cost concepts:

- a) CPK Cost of Capital
- b) Insurance cost
- c) Administration overheads
- d) Percentage Fuel of Total Variable cost
- e) Lubricants cost
- f) CPK maintenance
- g) CPK tyres
- h) Percentage depreciation of Total Annual cost
- i) Fixed cost per day
- i) Overhead cost operational

QUESTION 4

In the process of managing a Road Transport Enterprise the management normally utilises two different sets of accounting information to steer the organisation. Illustrate how you will apply this statement in a Road Transport Enterprise of your choice with due attention to:

- a) The users of the information.
- b) The differences encountered between the two kinds of accounting information.

QUESTION 5

Knowledge of costs remain important for the managing of a Transport enterprise. Analyse the two-stage allocation process for a Traditional costing system.

QUESTION 6

Specific analysis of costs and returns form the backbone of financial decision taking in an enterprise. You are required to analyse:

- a. Opportunity cost of an investment
- b. Compounding and discounting
- c. The Internal Rate of Return

QUESTION 7

Analyse the effect of Taxation and inflation on Investment decisions.

QUESTION 8

Analyse the stages of the process for initiating, authorising and review of projects.

(10 Marks)

(25 Marks)

(25 Marks)

(20 Marks)

(20 Marks)

(30 Marks)

(40 Marks)

(10 Marks)

ADDENDUM - QUESTION 1

₹	<u>v</u>	EHIC	LE	<u>C O N C E</u>	<u>E P T S</u>	Page	C1
			0.400				
01		Permissible	2 400	40		Permissible	28 00
UT		Unladen	1 400	12		Unladen	11 40
	(2400 kg or Loss)	PAYLOAD up to	1 000		(4x2 Rigid+2 Axle Trailer)	PAYLOAD up to	16 60
	(2400 kg or Less)				(4x2 Rigid+2 Axie Trailer)		
		Permissible	5 000			Permissible	43 00
02		Unladen	2 680	13		Unladen	15 7
		PAYLOAD up to	2 320			PAYLOAD up to	27 2
	(2400 to 5000 kg)				(6x4 Rigid+2 Axle Trailer)		
		Permissible	7 000		_ //	Permissible	55 20
03	6 <u> </u>	Unladen	3 100	14		Unladen	19 6
,5	───└⊖└─────	PAYLOAD up to	3 900	14		PAYLOAD up to	35 5
	(5001 to 7500 kg)		3 300		(6x4 Rigid+4 Axle Trailer)	T A LOAD up to	55 5
		Permissible	10 000			Permissible	43 00
)4		Unladen	4 210	15		Unladen	17 1
		PAYLOAD up to	5 790			PAYLOAD up to	25 8
	(7501 to 10000 kg)				(Doubles Combination)		
		Permissible	13 700	-	· //_U	Permissible	44 00
)5		Unladen	5 610	16		Unladen	19 5
		PAYLOAD up to	8 090			- PAYLOAD up to	24 4
					(Concept 08+2 Axle Trailer)		
		Permissible	24 000			Permissible	56.00
6		Unladen	8 660	17		Unladen	21 7
0		PAYLOAD up to	15 340			PAYLOAD up to	
		FAILOAD up to	15 540		(Concept 09+2 Axle Trailer)	FAILOAD up to	54 2
		Permissible	25 000			Permissible	56 00
)7		Unladen	10 720	18		Unladen	22 1
	(4x2 TT+Single Axle ST)	PAYLOAD up to	14 280		(6x4 TT+Tandem/Tandem ST)	PAYLOAD up to	33 8
	- /ワリ ╞━━━━━━	Permissible	34 000		- //U	Permissible	56 00
8		Unladen	14 440	19		Unladen	23 1
,0		PAYLOAD up to	19 560	15		PAYLOAD up to	
	(4x2 TT+Tandem Axle ST)		10 000		(6x4 TT+Tridem/Tandem ST)		02.0
				20			
	- //U	Permissible	43 000	20		Permissible	13 70
)9		Unladen	16 250			Unladen	53
-		PAYLOAD up to	26 750	PMA		PAYLOAD up to	83
	(6x4 TT+Tandem Axle ST)				4x2 Rigid		
				21	×		
		Permissible	40 000	21		Permissible	34 00
0		Unladen	15 420			Unladen	136
v		PAYLOAD up to	24 580	PMA		PAYLOAD up to	20 3
	(4x2 TT+Tridem Axle ST)				Four Axle Artic (4x2 TT+Tandem Axle ST)		
				22			
		Permissible	49 500	22		Permissible	43 00
1		Unladen	17 520			Unladen	18 3
•		PAYLOAD up to	31 980	PMA		PAYLOAD up to	24 6
	(6x4 TT+Tridem Axle ST)				(Doubles Combination)		
					(Doubles Combination)		

Total Annual Cost - Excl Fuel & Oil

5.9%

ADDEDNDUM - QUESTION 2

15 R	FA V	EHIC	LΕ	СО	SΤ	SCHEDULE	Edit	ion	59
Concept - 15	()					ASSUMPTIONS : Concept - 15		Augusta de galera de Autorea	
Five Axle Combination	المسل					Five Axle Combination Doubles Combination			
Doubles Combination				0	0	DROPSIDE Body			Apr-19
DROPSIDE Body									'
ANNUAL FIXED (STAND		R	cpk	%	%	PRIME MOVER	OR RIGI		
ANNOAL HALD (STANE	////0/00010		срк	70	70	Cost Price (excl VAT)		R	1,098,90
Cost of Capital (Finance)		104,577				Residual Value		%	25.0
Depreciation		201.085			7.2%	Finance - Cost of Capital (Interest)		% R	10.3
Insurance		201,000			1.270	- or Monthly Repayment Depreciation - Distance km 0			-
On Vehicle Staff		658,678	598,8	48,5%	23,6%		or Time	yrs %	5
Overheads - Administration		000,010	000,0	40,070	20,070	Insurance (% of Cost Price) Tare 7.550			7.5
Overheads - Operational							kg Licence	R	12,13
Licence		23,280				Number of Steering Axle(s)		no	
Other		0	0.0	0.0%	0.0%	Number of Tyres (excl spare)		no	045/000000
other			0.0	0.070	0.070	Tyre Size		-	315/80R22.
TOTAL ANNUAL FIXED CC	STS	1,357,736	1,234.3	100.0%		Tyre Price - New Tyre (excl VAT)		R	24,13
		1,001,100	1,201.0	100.070		- Retread (excl VAT)	00.000	R	3,35
VARIABLE (RUNNIN	G) COSTS	R	cpk	%	%	New Tyre Life - Front & Rear	80,000		100,00
	0,00010		орк	70	70	Retread Tyre Life - Front & Rear	. 80,000		100,00
Fuel		803,175	730.2	56.2%	28.8%	Number of Retreads - Front & Rear	0.0		2
Lubricants		000,110	100.2	00.270	20.070	TRAILERS OR SEN	AT TRAIL	***************	0.44.00
Maintenance		356,499				Cost Price (excl VAT) (1st + 2nd Trailer)		R	941,63
Tyres		250,327				Residual Value		%	0.0
Other		0	0.0	0.0%	0.0%	Finance - Cost of Capital (Interest)		%	10.3
		Ŭ	0.0	0.070	0.070	- or Monthly Repayment		R	
TOTAL VARIABLE COSTS		1,430,080	1,300.1	100.0%	51.3%	Depreciation - Time		yrs %	10
		0.707.010	0.504.4		100.001	Insurance (% of Cost Price) Tare - First Trailer 4,350	ka Licence	% R	5.0 4,92
TOTAL ANNUAL COSTS		2,787,816	2,534.4		100.0%		kg Licence kg Licence	R	4,92
						Number of Axle(s)	lucence	no	0,22
COST		From Tot	al An	nual		Number of Tyres (excl spares)		no	1
SUMMARY	Fixed Cost	Variable		Total	Cost	Tyre Size		-	315/80R22.
	Tixed Cost	Variable	0050	Total	0031	Tyre Price - New Tyre (excl VAT)		R	24,13
Cost per Day R						- Retread (excl VAT)		R	3,05
						New tyre life		km	120,00
Cost per Hour R						Retread tyre life		km	120.00
Cent / Ton . km						Number of Retreads		no	2.
At 70.0% Payload Utilisation						ON VEHICLE	STAFF		
and 75.0% Annual Laden km							no 1	R	38,90
		INDIC	ES	INCRE	ASES		no 1	R	15,98
INDICES and INCREASES		RFA 20	Base	From E	dition	ANNUAL FIXED O			,
		Mar 99 =	1000	RFA	58	Administration		R	144,37
Total Annual Fixed Cost		4439)	6.2	%	Operational		R	96,24
Finance + Depreciation		2500 2.1		%	Other Fixed Standing Costs		R	,-	
On Vehicle Staff		6324	1	8.8	%	VARIABLE (COSTS		
Total Variable Cost		7514		-1.7	%	Fuel Consumption	Litre / 10	00 km	49.
Fuel Cost		7301		-5.0%		Fuel Price	Cent		1,490
Maintenance Cost		7417	7	3.0	%	Lubricants (as % of fuel cost)		%	2.5
						Maintenance		cpk	324
		Annual	From	Previous	s From	Other Variable Running Costs		cpk	0
% INCREASE / DECREASE		Edition RFA 57 Edition		C-0.07 (0.020 (0.000))	UTILISAT	LON	opic	0	
Total Annual Fixed Cost		6.19		6.2		Annual Kilometres		km	110.00
Total Variable cost - Incl Fu	el & Oil	11.6		-1.7			% 70.0%	%	75.0
		5.5%		3.0		Days Worked per Annum	/0 /0.0/0	days	24
Total Variable cost - Excl Fuel & Oil						Chargeable Hours per Work Day		hrs	12
Total Annual Cost - Incl Fuel & Oil		0.97	8.9% 2.0% 5.9% 5.2%		/0	· Unargeable mours per work Day		IIIS	12

Average payload 25.9 Ton

5.2%