

CERTIFIED PUBLIC ACCOUNTANT ADVANCED LEVEL 2 EXAMINATION <u>A2.1: STRATEGIC CORPORATE FINANCE</u> DATE: WEDNESDAY 28, FFBRUARY 2024 MARKING GUIDE AND MODEL ANSWERS

SECTION A

QUESTION ONE

Marking guide:

Ques	stion	Description	Marks	Marks Tot		
Q1A	BRUN	Objective of the company	EFEBRU2	10PAU	CP AT	CPAIN
CPAR P	ED AIL	Non dividend payment	2	COURT	at204	Bref
ALCRIAR	BRUAR	Other stakeholders needs mentioned by management	2 BR 2	BRUT BRUT	CPAJIC A	6
Q1B	CPAPER CPAPER	Description	2410 PAL	ROBER	RUAR	PART
ET20EB	RURFEL	Managerial incentives (1 for state and 2 for explanation)	RUPAR 2	PARE	42024	10 × 12
PAPAIC	202 10	Share options (1 for state and 2 for explanation)	20002	ER OR	RUPBR	2RUA
RUAK	120024	Regulatory (1 for state and 2 for explanation)	JAPPAP2	2 REAL	PAREN ON	206
Q1C	R ARTO	NG 01 21 21 22 21	AU1002412	2202AI	RUABP	GEBP
FED241	1202 AR	Asset valuation (given 0.5)	ARUANAR	PARFU	RHOL	AREY
RUAL	BRUAR	PE Ratios (0.5) (Industrial PE x Earning)	BEEBIAUL	02412	221 E	UABR
CPARIER	aBrunk aRunk	Market prices (0.5) (MPS x no. of shares)	FYLUNBR	UALAR	AREIA	PH CPI
ICPARE!	aEBR02	Net present value of Future cash flow	EPARFE	35-510	24110	PAR
102 PAK	ARUA	Cash flow calculation	AICPARY	UARBR	J2024	REPA
2FEBE	EDEAR	Profits before tax each year (4x0.5 marks)	EBROFED	REUN	2012	120
AICP 02	ATOPALA	Tax for each year (4x0.5 marks)	CP02410RE	EP 121	NR 2	ARY
AR 2020	FEBREE	Tax Allowable Depreciation working for each year (4 x 0	.5 Mark	s)	2	NIC Y
ALCRA	Cash flow for assets replacement for each year (4x0.5 marks)				2	POR
ARYQUA	PET204	Cost of equity (CAPM method)				EBB
FEBRU	ICPAT	Use of dividend growth model after year 4	BRUCPAL	ALCPAT	2	16
Q1D	(i)	2001 BR 45 B 45 B 44 00 24 00 BE 58 B 20 00 A C B 2 B 2 B 2 B 2 B 2 B 2 B 2 B 2 B 2 B	202 ET20	AR Y2	EBROS	BBAR
EBROFE	BROM	Inflation of sale prices and revenue each year (4 x 0.5 ma	rks)	UPAR	02	LCPA LCPA
10Ph AR	21201 BR	Inflation of purchase cost and cost of sales each year (4)	α 0.5 Ma	urks)	2	BRUI
BRUM	BREER	Contribution each year (4 x 0.5 Marks)	RUALBRU	EBR	2	OPA2
10PALC	PALABI	Tax allowable depreciation each year (4 x 0.5 Marks)	PARTOPA	RF 202	2	120
120240	BRUAL	Inclusion of scarp and initial cost	202410	R BROF	0.5	PART
PARE C	OPALOP	Net Present Value	ARTECRARY	10PAL	0.5	9
Q1D	(ii)	20 8 32 32 20 12 12 10 1	02 21200	ALUA	BRUEF	BRU
BRUAR	PARTOF	Sensitivity analysis (model 1 mark, comment 2 ma	irks)	3	OP B	2024
Broght	202 212	Probability (model 1 mark, comment 2 marks)	241C12024	3	RUAR	3RUP
		Adjusted Discount rates (model 1 mark, comr marks)	nent 2	3	20241C	
FEBARY	2UARAL	Payback (model 1 mark, comment 2 marks)	PAR 200 PR	3	RY R	ARE C
BREED	REEBR	Total Charles Brance Control Brance B	REBARE	EBRAIC	802 C	50
Q1	Q1 Description M			Mar	k 1	ota
E	FEBR		O26BRUIE	S	BRID	
PALCPA	calc	ulation of share price (DVM 1 mark, answer 1.5)	ALCP12410	2.5	20 Para	2UAR
UARY2	men mar	tion of efficient market hypothesis not efficient 1 mark, e	ffect 2	3.0	AREAR PAREE	3PACP 02AICP

RARER	Alternative method any metos	2.0	0242025
1202 A	Conclusion (not overvalued 2 marks, wrong conclusion 2 marks)	4.0	10

Model Answers

(a)

The shareholder is right in asserting so since the company has been established solely to create wealth for its owners and primary financial management objective of a company is assumed to be the maximization of shareholder wealth.

Wealth is maximized by paying higher dividends and in appreciation of share prices

So, when there is a decrease or nonpayment of dividends, the investor is right to complain as they see their wealth diminishing.

Management has correctly replied, they do have responsibilities to all stakeholders of the company which the investor seems to be unaware of

Satisfying all stakeholder needs requires a careful balance (Other valid explanations are accepted)

(b)

Can be encouraged as through;

- Managerial incentives
- Regulatory requirement

Managerial incentive

- 1. Reward them with performance related pays
- 2. Share options schemes

Managerial reward schemes

A pay that is related to performance is normally links part of directors' remunerations to a specific KPI in the business, such areas my include increase in profitability, market share, growth in share prices

A major disadvantage of this is in identifying which part of performance to link that may not be manipulated by management since management have insider information about the company and are able to influence almost every aspect of the company

It may also lead to short-termism in that at management may be interested in short-term gains at the expense of longer-term benefits

Share options

In this, the directors become part of ownership of the company they work for. They are given an option to buy shares at a specific price, this encourages the directors to make choices which enhances growth in market value of the company. Such schemes create goal congruence

Regulatory requirements

These may be imposed by the market regulators and the government,

Company law requires a company to appoint external auditors who will report back to shareholders after carrying out the audit

For a company wishing to obtain a listing, market regulators will require the management to institute certain aspect to achieve good corporate governance, these may include instituting risk and remuneration committees, good system of internal controls, appointment of non-executive directors, and publication of financial statements

(c)

Calculation of range of prices

Range of prices	FRW Million
1. By market capitalization (mps x no. of shares)	4,970
2. Net asset valuation (given)	3,820
3. Using PE Ratio of the industry (PEx PAT) = 370*12.5	4,625
4. Free cash flow (see workings below)	6,438

(note required, given for the sake of student's revisions later on)

ML will wish to pay the minimum price that will attract the majority of Remera shareholders to sell. The current market capitalization is FRW 4,970 million, is likely to be the lowest that shareholders of Remera would accept, and unless there is an expectation that Remera's shares will fall further in value in the near future, a premium over the current market price will normally be payable.

If industry PE ratios are used to value Remera, it will be FRW 4,625 million The realizable value of assets, FRW 3,820 million, is substantially below the estimates The realizable value of assets is not the recommended valuation method unless it produces a value higher than the value as a going concern.

A better method of estimating the value of Remera is to use the cash flow projections to find the present value of Remera to ML. This will be based upon the free cash flow after replacement expenditure and expenditure required to achieve the forecast growth levels. Giving a value of FRW 6,438 (See working Below)

Free cash flow	PREBLUI 02°	120 NO. 98	RY RY JUP	120 2AT 10	UNEVABRUS
Financial years	2020	2021	2022	2023 20	024 onwards
Net sales	4,100	4,300	4,910	4,800	20 CB 12 120 CO
cost of sales	2,460	2,580	2,946	2,880	2ª OPP AR OVA
Sales and Administration expenses	120	150	100	250	DATER FEBRER
operating cash before taxation	1,520	1,570	1,864	1,670	PLOSE OF PL
Taxation at 30%	456 -	471 -	559 -	501	A Draft of
Allowable tax depreciation	180	189	189	189	LET SECOND
cash flow for future growth and asset replacement	300	200	150	240	50, CB 1 10, 410
Net Cash Star Brock and Star Star	944	1,088	480	1,118	22.02 42 02
PVIF at 20%	0.8330	0.6940	0.5790	0.4820	ROUP RT RE
2024, CP A2V 2014 B2 0A2 2014 B2 0A2 2014 B2 0A2 2014 B2 0A2 0A2 0A2 0A2 0A2 0A2 0A2 0A2 0A2 0A	BEUMERURED EBRUMERARDER EBROALORADER EV. BRADELEUR	REELCPARENDO 0241 CPARENDO 0241 CPARENDO 0241 CPARENDO 0241 CPARENDO 0241 CPARENDO	24202222222222222222222222222222222222	224 BRUEBRUEBRUEBRUEBRUEBRUEBRUEBRUEBRUEBRUE	we have use dividend row te
Present values	786	755	278	539	4080 model
2 Provide a start of the start	6,438	UNEXCEPT	EBBRERELBE	X0.02 001	2AL RUBRUNER
Cost of equity using CAPM RfRe = Rf+(rm-rf)xBe , 9+ (2)	18-9)x 1.2 =	19.8	TCI BUT DON	R . R Y	FED FE SPACE
we will use 20%	EB PEPPAR EF	2410024100	PATURE 201	BRAUMORN	CPALOP AREY
the UP BK BK OF IC'SUP RU EP UP OP	Show Shints	RY INFORT	ED, 080, 63,	apravial	10 Aravia

(**d**) (**i**)

Years	U PY20FEBREFE	A REEDANCE	2,02,02410 M	3 EBRORUARA	4 PALACEEBE	25 RY20 APRY2
Sales Revenues	2410PRALCP0241	13,545,0 00	24,557,03 1	37,865,20 9	15,491,44 2	ARTEBIAULOP
Variable cost	EEBBRUALOPAIA REEBBRUALOPAIA REEBBRUALOPAIA REEBBRUALOPAIA	7,848,00 0	12,118,62 0	19,736,24 2	9,824,608	2UABRUNEBBURGEBBR
Contribution	FEBRUEBRUCK	5,697,00 0	12,438,41 1	18,128,96 7	5,666,834	202410 JARD AND RUN 202410 JARDAN BEEBRURALOPAR
Less fixed cost	241 CUALBROEEB EEBRAREEBRAREEB IOPAREEBRAREE	1,810,00 0	2,015,000	2,125,000	2,100,000	UARY202AILUA UARY202AILUA UARY20EBRUA
Taxable cash flows	RY202ALCUATER	3,887,00 0	10,423,41 1	16,003,96 7	3,566,834	1ARY202ARY202 JARY202ARY202 JARY20ARY202
Taxation	2420241202 AB	20 ARBRUIEBRU AEFEBRUEBRU AEFEBRUEREBRU	(1,166,10 0)	(3,127,02 3)	(4,801,19 0)	(1,070,05 0)
TAD benefits	UARALOPPARO 21202AL202AL20 2120AR20AR220	20241CPUARTUA 20241CPUARTEBRUA OFEBREARTEBRUAR	18,000,00 0	13,500,00 0	10,125,00 0	18,375,00 0
Initial and Scrap v	240,000,0 00	241CP2024 CPA	22 UAPBRUARD BRUARDBRUARD PARTEBRUARD PARTEBRUARD	EPARTOPAR ACPARTOPAR EV2024 CPAR	40,000,00 0	EEBAREEBAREE
After tax cash flows	240,000,0 00	3,887,00 0	27,257,31 1	26,376,94 3	48,890,64 4	17,304,95 0
PVIF at 18%	12 AUBRORUBR	0.847	0.718	0.609	0.516	0.437
Present values	240,000,0 00	3,292,28 9	19,570,74 9	16,063,55 9	25,227,57 2	7,562,263
02 20 241 RUGBRUEER	WARPATICK 24	CPARTA AP	UNRYDERBER	CPAN FED 241	Stat2 24 OUP	BRUEBBRUAD

ARART CARTO PARTERS	311,716,4	20 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20222028
NPV	32	BEEL 25 25 02 12 02 02 02 02 02 02 02 02 02 02 02 02 02	UAABRUAR

Working 1

Sales revenues	102 ARYRUARY202	2 BR BR BRUNN	3 PEBLEBRARE	R 4 AULOPANOPUN
Sales volume	600,000	850,000	1,270,000	580,000
Selling price (FRW)	21.00	25.00	24.00	20.00
Sales prices (FRW)	22.58	28.89	29.82	26.71
Sales Revenue (FRW)	13,545,000	24,557,031	37,865,209	15,491,442

Working 2

Variable cost	A BUNCPALOPO24	OPA RY UAR BRUNARY RE	ED RECPARAPEDIAN	SP 20202 EBREBREBREB
Sales volume	600,000	850,000	1,270,000	580,000
Cost of sales	12.00	12.00	12.00	12.00
Inflated	13.08	14.26	15.54	16.94
Total variable cost	7,848,000	12,118,620	19,736,242	9,824,608

Working 3

Tax allowable depreciation	Cost	OPANCE OPARY 20 ARY 20	EBREFEPARTEBRAULO2
24 CP 24 CO 24 CP 1 A RUAR UAR RUAR RUAR AR	CPAROPAR ARE 2024 120 AR	Depreciation at	10 ALOPARY ARBRU
Year	Cost/CV	25%	Tax Sield
1 022 ALCELAIO OLA MOUNERUAL ON	240,000,000	60,000,000	18,000,000
22 her JAR ROOFEBERED ARE TEBLAN	180,000,000	45,000,000	13,500,000
3 BEELBROADP 2410241410P ARRUAN	135,000,000	33,750,000	10,125,000
402 A2 20 A2 1 A2 22 0 EB 28 E ARE	101,250,000	61,250,000	18,375,000

(d) (ii)

There are several ways of considering risk in the investment appraisal process.

Sensitivity analysis

Looks at effect on NPV if one variable change. It is a what if analysis, which ask the question, what if a variable was to change by let's say 5%, how will it affect the NPV. It is calculated by computing NPV of each variable, this it then divided buy the overall NPV to give a relative percentage change. Sensitivity considers each variable at a time, which is unrealistic since variable may be related at would cane at the same time.

It also does not give the probability of a particular change in a variable being evaluated. It does point to a variable that management need to focus on most, i.e. the sensitive areas.

Probability analysis

An expert can study the variables associated with a given project and assign to probabilities of the project being a success or a failure.

In such a case, one can calculate different possible outcomes after the probabilities have been assigned.

Risk-adjusted discount rate

The discount to be used in appraising a project is adjusted accordingly, so where the risk is of the project under review is higher compared to the existing risk profile of the company, the discount is adjusted accordingly to reflect risk level of the project CAPM may also be used to calculate projects specific risk.

Payback Period

This considers how long it takes to recover the initial outlays on the project, the shorter it takes to recover the investment the safer it is for the company, in this case, uncertainties associated with longer period cash flows are avoided

(e) Use dividend model do(1+g) Do = 25.02G = 5%Price = d1/(ke-g) = FRW25.02(1.08)/(0.125 - 0.08) = FRW600

1. Market efficiency

The analyst has based this calculation using already publicly available information, implying that the stock market is not semi-strong form efficient. Since all public information should be reflected in share prices in a semi strong form of stock market efficiency

2. Alternative methods

Using dividend growth model is an inferior method of estimation the share price, the method suffers from assumptions made such as unrealistic and unattainable constant growth rate in dividends.

It is based on accounting earnings, these are prone to manipulation, a more superior method like discounted free cash flow should be used

3. Conclusion

The analyst is probably not justified in suggesting that the share is overvalued based upon only this evidence

QUESTION TWO

Marking guide:

Q2(a)	Description	Marks	Total
EBRUAR	ownership public or private	2.0	10PRUAR UA
FE 202420	capital structure	2.0	FED ARTOPART
BRUMBRU	definition of ratios	2.0	1202 ALOPHAN
CPARAFTO	Age of assets	2.0	RY20 FEB ARE
ATOUARBRI	management policies	2.0	ICPAULOZAICA
CPAR CPAR	any other relevant difference mentioned	2.0	20 AP RY20 FF
1202 ALCIA	Upto a total of 6 marks	1202 ARY 202 ABREBREE	BRUAIC' 6
Q2(b)	Description	Marks	2420 AVIAR R
Pho202 1202	Calculation of current EPS	0.5	BEEBEBEBEUE
BRUNET	Calculation of New EPS	0.5	CPAR 2420 PY2
EBRORUATEA	Calculation of current dividend cover	CRARRED 024 202 212 1.0	BREBRERE
25 202 4203	Calculation of New dividend cover	1.0	ARCPAREY
BRUFEBRI	Other factors that shareholders take into account	2.0	2024BRUABR
10PAREBRI	Modigliani theory of dividend irrelevance	2.0	PARCPARAICPI
ICPARTERS	10 41 02 12 02 14 01 18 01 18 01 18 01 19 01 10 01 10 01 10 18 01 18 01 18 01 18 01 18 01 18 01 18 01 18 01 18	AR REED ARE PARTER AND	0200075
Q2(c)	Description	Marks	120 PARTRA
REPEARENCE ALCOART COP	Cost of equity (CAPM)	RUMARY FEBRER P 1.0	2402024202
	Weight of equity	0.5	UABRUIAR
AV202FER	Cost of debt using IRR	200 ARYRUAR AICHBRARTER	25 BEED AUTO2
AICPA102	at 14%	0.5	ARYDUARBRU
ARTRUARY	at 20%	0.5	FERAREFED
FEBRAICP	IRR formula use	20 TER THE BRUCE 1.0	2ALCPARY2UP
BY INPRI	correct cost of debt	0.5	REBE REPART
EBREBEB	Market value of debt	0.5	AIC 22 AICPL
1020PARY2C	Weight of debt	RECENTION OF 10 0.5	ALEY OF BROK
EBROFERR	cost of bank loan	0.5	CPARALOPAL
10PAICPA	weight of bank loan	0.5	RYDUAR Y20
1202 6BPC	use of WACC formula	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	EBRUCPAR A
CPARICPA	WACC	0.5	2202 RY20AR
120 AR 02	A BE COMPARED BE NOT BE COMPANY AND A BE COMPANY AND A BE	AREE 0241202 RT 20242 UN	8
Q2(d)	Description	Marks	CPART202 R
1202 1202	Definition of projects finance	2.0	ALUAT BROFFE
BRUNEBRU2	Project not finished on time, budget or not at all	2.0	CPARTCPART
PARUP 02	Project not function	2.0	12002ALUAL
FRUARUA	No funds	2.0	ARTE PARTO
PARTCPART	Abrupt stop	2.0	1202 812024
24UCPAUA	Minimum of	AICPAAC 2024 ICPARTEURS	BRUNR RE4
20 REE ARE	Total	ARY RUARY 20 FEBRUARE OPART	25

Model Answers

(a)

Companies might have very different characteristics to Dodola so any direct comparison should be taken with caution

Areas of differences arises in:

- 1. Ownership structure affect vision and vision of companies, listed companies with a large base of shareholders may have a different mission compared to a family-owned limited company even when they are in the same industry or same size making a comparison difficult.
- 2. Capital structure companies will not have the same debt ratio, some may be lowly gearing and others highly geared.
- 3. Formulas or composition to be used in each calculation may differ from company to company, for example when calculating debt ratio, what amounts as debt is relative. Is permanent current liability a taken as long-term debt in calculating gearing ratios?
- 4. Asset base of companies may be in the same industry but have completely different asset bases, for example when comparing asset turn over, a similar company with fully depreciated asset will show higher return compared to that with relatively newer assets
- 5. Age of assets will affect calculations such as ROCE. Asset turn over
- 6. No similar company, in size or structure getting a similar company with which to benchmark may not be an easy task making comparison less useful

(b)

Introduction, not mark

This policy should only be followed if the company does not have projects with positive net present value otherwise retained earnings are the cheapest and readily available source of finance for a company

Current and new EPS

If the total amounts of dividends are going to be increased by 20%, then the following will be observed

Current dividend pare share = FRW6/300 = FRW 0.2 per share, this will increase to FRW 0.24 per share

Current and new dividend cover

Total dividends will now be at FRW7200 giving a dividend cover of 5 times (36/7.2) as opposed to the current of 6 times (736/6)

Shareholders do take many factors into account before making an investment decision and not dividend payment only including sound corporate governance, risk appetite

According to Modigliani and Miller, dividend payment is irrelevant so if a company wishes to increase its marketability, it should simply make good investment decisions and communicate it to the market

The proposal should be rejected and should stick to its current policy if they have one

(c)

WAAC	20 RY20 ARY	202 EBREED	REFERENCION	2410222410 RUABRUA
WACC = $[(19.4 \times 7200) + (16.0 \times 385)]$	5.2) + (8.4	x 200)]/(72	200+385.2	(2+200) = 18.95%
BRUNAS NEED AS A CRAEFEEFE UNECTAR OF AND ADDA	PART 20 ARTS	UARY20EB	2FEPARFER	2401202412024141020

(**d**)

Definition of

Project finance is finance for a particular project, Reasons why a company may seek proper management of a project finance is because they are unique and substantially involves huge amounts of fund

Possible risks associated with project finance would include: -

- Project not being finished on time, on budget, or at all
- Project not functioning at its full capacity
- Project failing to generate sufficient revenue to service the debt
- Project hastily comes to an end

QUESTION THREE

Marking Guide

Q3(a)	Description	Marks	Total
EBRUAR	How pecking order works must mention	BR 2410 AUTO 202410	PAUAKEUA
FE202420	internal equity first	1.0	ARTCRART
BRUAEBR	cheap external debt	1.0	02 AICEUA
CPARAFPD20	more expensive external equity	PAR RY RY 1.0	REEDREE
+ 10 UARBR	not working towards optimal capital structure	2.0	AU10245
Q3(b)	Description	Marks	JAR RY20FF
120224101	Contribution	0.5	ROALCH AUL
REFERENCE	Annual revenues	0.5	ARUAR
P1024120	Fixed cost	0.5	FEB BROAK
BRURRY	initial investment	0.5	NR Y20 RY2
BRUARUS BRUARUS BRUARUS BRUARUS BRUARUS	Annuity factor	0.5	GEBRUFEBY
	Present Values	0.5	ATOPARA RY
	Ungear	2.0	26BR EBR
CPARFE BR	Regear	2.0	RCPARAICPI
ICPAREEPER	Use of CAPM - cost of equity	0.5	RY20 PAIR
ALCRUAR	WACC	AL INP 201.5	202 PARCEN
REPARTAC	NPV	0.5	V1202 470
A10,202,010	Advise of the project	0.5	10.00
Q3(c)	Description	Marks	SED 240102
A102410	100% equity	1.0	2 RUAR BRO
ARTRUAR	50% Equity :50% debt	1.0	CPAREFERS
FEBRAICE	30% equity: 70% debt	1.0	AICHARTRUI
ARYLOART	Advice	2.0	5.00
Q3(d)	Description	Marks	RV2024100A
EBROFEB	Use of formula to calculation of failure indicator digit	2.0	PARALOPIA
10PhAICPR	Any two reasons each 1.5 marks	3.0	5.00
Y20240BP	Total	Y2024 UNEBROF	25.00

Model Answers

(a)

Pecking order theory is whereby companies do choose from sources of finance which are immediately available and easily reachable.

The order is that they will first of all access retained earnings (internal equity) since this is within their reach once internal equity is exhausted, it will look for cheapest external finance which is debt before turning to a more expensive external equity.

In this model, companies go for the cheapest and readily available sources of finance and not necessary looking for ways to minimize Weighted Average Cost of Capital (WACC).

(b)

Contribution =720-465	255
Annual revenues	67,500
(units x contribution) 225 x300	BREBRUREEBRUR CPAULO2ALCPH
Less Fixed cost	10,000
Net cash 32 1 1 2 1 CP AC A CP A CP A CP A CP A CP A CP A	57,500
Annuity (Use Annuity) at 14%	2.914
PV AC AR BRUTER AR RECORDER REFERENCE ARE BRUT AR REFERENCE	167,555
Initial Investment	70,000
NPV	97,555
project should be taken	A CONTRACTOR AND
Calculating WACC	<u>AR^B 02 02 02 02 04 02 08 08 08 08 08 08 08 08 08 08 08 08 08 </u>
WACC = [(18 x 60%) + (9 x 40%) = 13.30%	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Ungear the equity beta to asset beta	40° 0 ^{AN} 08° 28 ^A 10° 20° 0 ^A 28° 08 4 ^{EB} 2 ^{EE} 0 ^A 2 ^{EE} 0 ^A 10 ^A 20° 08 ^A 28° 08 ^A
$\beta a = \beta e Ve/(Ve + Vd(1 - T))$	0.78
1.6 x 40/40+60 x0.7	UN 024 CPA CC 22 201 201 201 00 00 00 00 00 00 00 00 00 00 00 00 0
Regear the asset beta to equity beta	<u>B¹ 10^{A1} 0^{A1} 6^{B1} 3^{B1} 10^A A¹ 6^{B2} 6^{B2} A¹ 0^A 10^A 10</u>
$\beta e = \beta a (Ve + Vd (1 - T))/Ve$	200 820 88 10 BR 618 1.144
0.78 x 60+40 x0.7/60	EBROTEBE CORNECTION OF A CONTROL OF A CONTRO
Calculate cost of equity using CAPM	AUNERUNEBEURINE (PARIO PALOTE
rf+rm-rf)x Be	18
10 + 7 x 1.144	2202ALUARBRUEBRUAR ARACTAR
Cost of Debt(given)	9%

(c)

BRUNCERA 1202 BREUAR BRUNDRUUMR HAR PARTIC	All equity	50% E: 50%D	30%E:70%D
Earnings in millions	150	150	150
less Interest	APICPARTE 024	50 OBREEBERE	70
Dividends	150	100	80
Cost of debt (Kd)	0%	6%	10%
Cost of equity (Ke) = Do/Po	15%	20%	27%
WACC = (ke x Ve + Kd x Vd)	15%	13%	18%
Value of the firm = cash flow /WACC	1,000	1,154	818
UN REAR OF NUT OF REAL	FEBRUALOPO2410	optimal capital structure	

$(\mathbf{d})^{A} \geq^{O} \sum_{i=1}^{A} \sum_{j=1}^{A} \sum_{i=1}^{A} \sum_{i=1}^{A} \sum_{i=1}^{A} \sum_{j=1}^{A} \sum_{i=1}^{A} \sum_{i=1}^{A}$				
Earnings before interest and tax	82	S1	(82/32) x 3.5	0.66
Market value of equity	432	S22	(-20/605) x1.8	- 0.06
Working capital	-20	S 3	(432/348) x0.25	0.31
Medium- and long-term capital employed	605	S4	(348/809) x0.69	0.30
The present value to infinity of current operating free cash flow/turnover	401	BUAREBBR	Factor to be interpreted	1.21
Market value of debt	348	BRUARBRUA	SPRUNCPACPANOPARE	UARUARAR
Turn over	809	Y202AICEP	RUAD RUAD AND AND AND AND AND AND AND AND AND A	CARTER CO241 CARTER CO241 CARTER CO241

Brief comment

The SO model suggests a score of 1.20, that is above the level of probable failure but still Uwamaliya must make drastic steps to move out of the danger zone and survive

Problems of models are

- 1. they are normally tailor-made to specific industries and of certain sizes therefore may not predict failure for every company
- 2. Accounting information suffers several weaknesses, so if the model uses the same information, it as well suffers from disadvantage of accounting information
- 3. the model may predict a probable failure; however, management may put strategies in place and revive the company rendering the model useless

Financial crises and economic downturns can lead to segmentation as investors become risk-averse. During periods of uncertainty, investors may retreat to domestic markets, contributing to a segmentation effect

QUESTION FOUR Marking Guide

No	8 12026138 FEB 81 5638 40 024 10 12 12 12 14 158 10	PLAY2 FEBFEL ARTEBRUS	Marks
a	5 pointS@1mark		5
b	Forward rate computation	2	10
	Money market net borrowing	2	
	Money market net investment	2	
	Forward contract amount	2	
	advice	2	
C	5 points @1mark	24 212 OZALQUA BRUABRARU	PACPAIOPAN 5
d	LIBOR interest	2	5
	Savings on cost	3	BRUICPAICPAICPAICP
EBARK	Total marks	EBBRUCENCE CALCERS 2	20

Model answers

(a)

Basing on the above scenario give five key financial risk facing the enterprise

i)Interest Rate Risk:
ii)Credit Risk:
iii)Market Risk:
iv)Foreign Exchange Risk:
v)Liquidity Risk:

\$1=FRW 1,265.01
\$400,000
=5.57%
=5.10%
\$1 =FRW 1,268.26

No hedging of the receipts

Amount receivable =\$400,00x1268.26 =FRW 507,304,000.00

Using forward contract F=s(1+P) P= (1+Ih/ (1+If) -1

1+ih=1+5.57%X3/12=1.013925 1+if=1+5.10%X3/12=1.01275 P=1.013925/1.01275-1 P=0.00116 F=1265.01(1+0.00116) F=1266.48 Amount receivable=1266.48x400,000 =FRW 506,591,069.56

Using money market hedging Borrow in USA net of interest=400,000-400,000x3/12x5.10 = \$394900 Invest in RWANDA for three months =\$394900x1265.01x5.57%x3/12 =FRW506,508,716.85

Decision the company should not do any hedging because without hedging they will receive the highest amount

(c)

Five best strategies that they can use to manage exchange rate risk
i) Forward Contracts:
ii) Currency Diversification:
iii) Natural Hedging:
iv)Currency Swaps:
v)Use of Options

(**d**)

Calculate the annual interest expense if the LIBOR rate increases by 1%. Show the formula and the numerical calculation.

loan amount	5,000,000
base interest	3%
LIBOR rate	1%
Interest =(5,000,000x4%)	\$200,000.00
ii)Calculation of Potential Annual Savings or Costs with an Interest Rate Swap:	402241028120241028120201 1212022410201201201 1212022410201201201201
potential saving/cost=loan x (fixed rate-LIBOR rate)	CRARHOPALAICIPA
loan amount \$	\$5,000,000
fixed rate	4%
annual rate	3%
Interest 5,000,000x (4%-3%) =	\$50,000.00

END OF MARKING GUIDE AND MODEL ANSWERS