MNF3015/101/3/2009

university of south africa

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BAR CODE
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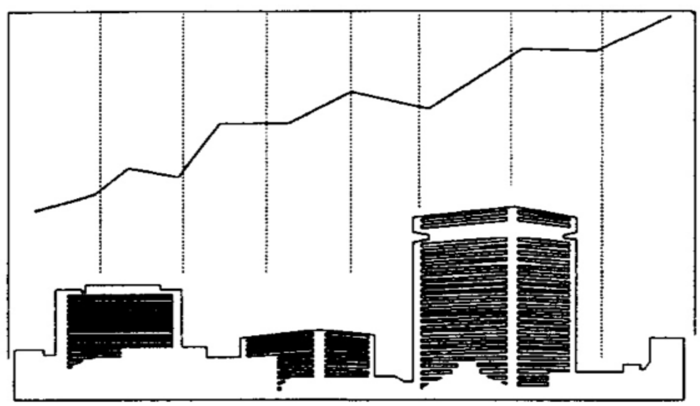
DEPARTMENT OF FINANCE AND RISK MANAGEMENT AND BANKING



FINANCIAL MANAGEMENT III
(MNF3015)

TUTORIAL LETTER 101/2009

UNISA

CONTENTS

Dear Student

1 INTRODUCTION

We welcome you as a student in Financial Management and trust that you will have a pleasant, interesting and successful semester of study.

This tutorial letter refers to the MNF3015 paper in Financial Management. It mentions specific issues such as assignments and due dates for assignments.

IMPORTANT:
It is imperative that you study TUTORIAL LETTER MNALLE-Q/301/4/2009 thoroughly as it provides important information on general aspects pertaining to all undergraduate papers.

You are also referred to the brochure titled ***Unisa: Services and Procedures*** for general information on aspects such as book-sellers, orders, regional offices, instructions for the use of mark-reading sheets and the use of the library. Study the brochure and this tutorial letter thoroughly.

2 TUTORIAL MATTER

The tutorial matter for this paper (Financial Management – MNF3015) consists of the following:

- **Supplied by UNISA**

  One study guide
  A number of tutorial letters

- **Prescribed material**

The compulsory prescribed book for Financial Management is:
Gitman, L.J. 2009. ***Principles of Managerial Finance***. 12th edition. New York: Addison-Wesley.

You are allowed to use a financial calculator in the examination. We advise you to acquire one, since it makes the calculations prescribed in this course easier and will save you a lot of time when writing the examination. Please make sure that the calculator you buy is able to perform NPV and IRR calculations. We recommend a HP10BII model. Students who are in a possession of Sharp EL-733 and Sharp EL-735 may use them. However the suggested solution will be compiled by the HP10BII model.

3 GUIDELINES FOR STUDYING FINANCIAL MANAGEMENT

Please read the introduction and the section on the division of tutorial matter in your study guide carefully.

You will soon realise that Financial Management is a dynamic field of study, and that you need both the insight into and the ability to apply its principles in practice. A superficial treatment of the tutorial matter and the prescribed book will be totally inadequate for successful completion of this module.

To establish whether you understand the important principles of financial management and their application, you are encouraged to attempt the questions at the end of each topic in the study guide and the prescribed book. In conclusion, please note that previous examination papers are not made available to students.

4 SUGGESTED STUDY PROGRAM

The following study program may be followed to best utilise the 15 weeks of the semester:

STUDY UNIT	TOPIC	STUDY PERIOD (WEEKS)
1	Capital budgeting and cash flow principles	2
2	Capital budgeting techniques	2
3	Risk and refinements	2
4,5	Cost of capital	2
6,7	Leverage and capital structure	2
8,9,10	Dividend policy, Leasing, Mergers	3
1-10	Revision of all work	2

5 ASSIGNMENTS

5.1 Compulsory assignments

In order to fully benefit from our formative tuition and assessment, you are required to submit the compulsory assignments. Please ensure that these assignments reach the University before the due date.

> Your year mark, based on the mark obtained for the compulsory assignments, contributes 10% toward your final mark, while your examination mark contributes 90%.
>
> The combined weighted average of your year mark and examination mark must be 50% or higher for you to pass the module/subject. However, you must obtain a minimum of 40% in the examination, regardless of your year mark. If you obtain less than 40% in the examination, you will fail.
>
> For example:
> Assignment mark 01 = 60%
> Assignment mark 02 = 80%
> Average mark = 70% (60% + 80% / 2)
>
> 10% of the assignment mark = 7%
>
> Examination mark = 50%
> 90% of the examination mark = 45%
>
> Final mark = (10% assignments mark) + (90% examination mark)
> = 7% + 45%
> = 52%

Five assignments are set for this module. Please ensure that the compulsory assignments 01 and 02 reach the University before the due date. Late submission of the assignment will result in you not being admitted to the examination. You are encouraged to submit your assignments on the myUnisa system. The address is: https://my.unisa.ac.za. Do not fax your assignment as the mark reading equipment is unable to read this format.

The assignment questions are typical of questions that can be expected in the examination.

Suggested solutions (Tutorial Letter 201) to the assignments will be sent to you during the course of the semester.

5.2 Due dates for assignments

The assignments for this module appear in ANNEXURE ONE. The breakdown for the assignments is as follows:

ASSIGNMENT	DUE DATES	TOPICS
First semester		
Assignment 01	27/02/2009	Topic 1
Assignment 02	03/04/2009	Topics 2 and 3
Assignment 03	No submission	All of the topics
Second semester		
Assignment 01	21/08/2009	Topic 1
Assignment 02	25/09/2009	Topics 2 and 3
Assignment 03	No submission	All of the topics

IMPORTANT

- Remember that your assignments must have exactly the same unique number as the one specified in this tutorial letter.
- Please allow three weeks to elapse after the closing date of an assignment before you make enquiries about a particular assignment.
- You may use the myUNISA system to obtain information via the internet about assignments.

6 LECTURERS AND CONTACT DETAILS

The lecturers for Financial Management (MNF3015) are as follows:

LECTURER	ROOM NO	TELEPHONE NO	E-mail address
Mr AM Phenya	AJH 3-115	(012) 429-4493	Phenyam@unisa.ac.za
Dr MS Ngwenya	AJH 3-121	(012) 429-4937	Ngwenms@unisa.ac.za
Mr C Chipeta	AJH 3-118	(012) 429-3757	Chipec@unisa.ac.za
Mr KS Naicker	AJH 3-100	(012) 429-4431	Naickks@unisa.ac.za

You may contact the lecturers at telephone number (012) 429-4211 which is a pilot number linked to all extensions in the section Financial Management.

7 CONCLUDING REMARKS

We trust that the module in Financial Management will be of value to you in your work situation as well as on a personal level. We hope too that your studies in Financial Management will stimulate you to pursue postgraduate studies in this field.

Yours sincerely

LECTURERS IN FINANCIAL MANAGEMENT
DEPARTMENT OF FINANCE AND RISK MANAGEMENT AND BANKING
Unisa

ANNEXURE 1 ASSIGNMENTS FOR 2009

Kindly note that there are two compulsory assignments for the first semester.

FIRST SEMSTER ASSIGNMENTS

ASIGNMENT 01

UNIQUE NUMBER: 652374
DUE DATE: 27 February 2009

ASSIGNMENT 01 COMPULSORY

1 The cash flows of any project having a conventional pattern include all of the basic components **excepts …**

1 initial investment
2 operating cash outflows
3 operating cash inflows
4 terminal cash flow

2 The book value of an asset is equal to the …

1 fair market value minus the accounting value
2 original purchase price minus annual depreciation expenses
3 original purchase price minus accumulated depreciation
4 depreciated value plus recaptured depreciation

3 A company has decided to replace an existing machine with a newer model. The old machine had an initial purchase price of R240 000 with R30 000 installation costs and has R150 000 in accumulated depreciation. If a 30% tax rate applies and the old machine can be sold for R180 000, what will the tax effect of the replacement be?

1 Loss of R12 000.
2 Benefit of R12 000.
3 Loss of R18 000.
4 Benefit of R18 000.

4 AT Battery expects that it's charger will generate a net after-tax profit of R100 000 per year over the next 4 years. The charger was purchased for R20 000, has a life span of 4 years and will be depreciated to a book value of zero on a straight line basis. The firm is subjected to 29% tax rate. The firm's operating cash flow for each year is equal to …

1 R 88 000
2 R 94 000
3 R101 000
4 R105 000

5 The portion of an asset's sale price that is above it's book value and below initial purchase price is called …

1 a capital gain
2 recaptured depreciation
3 capital loss
4 book value

6 Quick Print cc intends purchasing printing equipment for R120 000. The installation cost amounts to R8 000 and the investment requires an increase of R2 000 in net working capital. The initial investment equals …

1 R120 000
2 R126 000
3 R128 000
4 R130 000

7 Which of the following rules are essential to successful cash flow estimates and ultimately, to successful capital budgeting?

1 The initial investment is the only relevant cash flow.
2 Only incremental cash flows are relevant to accept/reject decision.
3 Total cash flows are relevant to capital analysis and accept/reject decision.
4 None of the above is correct.

FOR QUESTIONS 8, 9 AND 10 REFER TO THE FOLLOWING INFORMATION:

Vastine Medical is considering replacing its existing computer system, which was purchased 2 years ago at a cost of R325 000 and has been depreciated by R20 000 annually. The system can be sold today for R200 000. The new computer system will cost R500 000. Assume a 29% tax rate.

8 The book value of the existing computer system is …

1 R 40 000
2 R285 000
3 R460 000
4 R500 000

9 The after-tax proceeds from the sale of the existing computer system is …

1 R200 000
2 R211 000
3 R215 000
4 R224 650

10 The initial investment associated with the replacement of the computer system is …

1 R240 000
2 R275 350
3 R300 000
4 R500 000

11 In comparing the internal rate of return and net present value methods of evaluation …

1 internal rate of return is theoretically superior, but financial managers prefer net present value
2 net present value is theoretically superior, but financial managers prefer to use internal rate of return
3 financial managers prefer net present value because it is presented as a rate of return
4 financial managers prefer net present value because it measures benefits relative to the amount invested

12 A firm is evaluating a proposal which has the following cash flows:

Year	**Net cash flows**
0	-R40 000
1	R20 000
2	R25 000
3	R 5 000

The payback period is ...

1 1 year
2 1.8 years
3 2.8 years
4 3.8 years

13 One method of comparing mutually exclusive investments of different duration is to …

1 consider only cash flows during the payback period
2 apply different discount rates
3 evaluate over an equal number of years
4 consider only cash flows after the payback period

14 The present value of the cash flows of an investment is expected to total R1 500 000. The profitability index (PI) is 1.25. The initial investment is …

1 R1 000 000
2 R1 200 000
3 R1 600 000
4 R2 000 000

15 Some firms use the payback period as a decision criterion as a supplement to sophisticated decision technique because …

1 it explicitly considers the time value of money
2 it can be viewed as a measure of risk exposure
3 the determination of payback is an objectively determined criteria
4 it can take the place of the net present value

16 There is sometimes a ranking problem among NPV and IRR when selecting among mutually exclusive investment. This ranking problem only occurs when …

1 the NPV is greater than the crossover point
2 the NPV is less than the crossover
3 the cost of capital is to the right of the crossover point
4 the cost of capital is to the left of the crossover point

THE FOLLOWING INFORMATION REFERS TO QUESTIONS 17 AND 18:

ABC Ltd has undertaken a project with an initial investment of R5 000 000 the following cash flows. The cost of capital is 0%.

Year	**Cash inflows**
1	R1 800 000
2	R1 900 000
3	R1 700 000
4	R1 300 000

17 The net present value of the project is …

1 (R 137 053)
2 R 371 764
3 R1 000 000
4 R1 700 000

18 The internal rate of return is …

1 7.90%
2 10.00%
3 11.50%
4 13.57%

19 The amount by which the required discount rate exceeds the risk-free rate is called …

1 the opportunity cost
2 the risk premium
3 the equivalent
4 the excess risk

20 Sadik Industries is considering investing in a project with an initial investment of R1 000 000. The project is expected to provide equal cash inflows over its 15 year useful life. The cost of capital is 10%. Based on this information the breakeven cash inflow for the project is …

1 R 80 000
2 R 100 000
3 R 131 474
4 R1 000 000

ASSIGNMENT 02

UNIQUE NUMBER: 554156
DUE DATE: 03 April 2009

ASSIGNMENT 02 COMPULSORY

1 Which one of the following statements is correct?

1. The only cost of a specific source of capital that has to be adjusted for tax is the cost of debt.
2. The weighted average cost of capital can only be found by weighting the cost of each specific type of capital by its proportion in the firm's target capital structure.
3. A breaking point is the level at which the cost of all the financing components rises.
4. The smaller the differences between the internal rate of return (IRR) and the weighted average cost of capital (WACC), the larger the resulting net present value (NPV).

2 What is the dividend on an 8 percent preference share that currently sells for R45 and has a face value of R50 per share?

1. R3.33
2. R3.60
3. R4.00
4. R5.00

3 Earnings before interest and taxes (EBIT) is a descriptive label for…

1. operating profit
2. net profit before taxes
3. earnings per share
4. gross profit

4 Telkom debentures with a coupon rate of 8 percent and a par value of R1 000 were issued for R1 150 each. The average tax-rate is 40%. The debentures have a 10 year life. The approximate after tax cost of the debentures are …

1 3.6%
2 4.8%
3 6.0%
4 8.0%

5 A firm has ordinary shares with a market price of R55 per share and an expected dividend of R2.81 per share at the end of the coming year. The dividends paid on the outstanding shares over the past five years are as follows:

Year	**Dividend**
1	R2.00
2	R2.14
3	R2.29
4	R2.49
5	R2.62

The cost of the firm's ordinary shares is…

1 4.1%
2 5.1%
3 12.1%
4 15.4%

6 A firm has issued 8% preference shares at R100 par value. The flotation cost was R3 per share and the firm's marginal tax rate is 40%. The cost of the preference shares is …

1 7.35%
2 7.50%
3 8.25%
4 9.85%

7 A firm has discovered that its retained earnings of R400 000 will soon be exhausted. What is the point at which the firm will no longer be able to sustain the retained earnings cost of 6%, if they have a historical weight of 40% in the firm's WACC?

1 R 100 000
2 R 160 000
3 R 750 000
4 R1 000 000

8 A firm manufactures one product. The price of the product is R20 000 per unit (fixed). The firm's total fixed costs amounted to R100 000 and the variable cost per unit R15 000. The firm must achieve sales of … in order to make a profit of R200 000.

1 R 620 000
2 R1 280 000
3 R2 180 000
4 R3 460 000

9 A decrease in fixed financial costs will result in … in financial risk.

1 an increase
2 a decrease
3 no change
4 an undetermined change

10 Given that the cost of ordinary shares is 18 percent, dividends are R1.50 per share, and the price of the share is R12.50 per share, what is the annual growth rate of dividends?

1 4%
2 5%
3 6%
4 8%

11 Which one of the following statement is incorrect?

1 The interest payable on long-term debt reduces the tax that a company should pay.
2 The cost of capital can be defined as the minimum rate of return that a firm should earn on its investments.
3 The cost of preference shares is a fixed financing cost and can therefore be deducted for tax purposes.
4 The cost of retained earnings is equal to the required rate of return on owners` capital.

12 A firm has a current capital structure consisting of R400 000 of 12 percent annual interest debt and 50 000 ordinary shares. The firm's tax rate is 40% on ordinary income. If EBIT is expected to be R200 000, the firm's earnings per share will be…

1 R2.40
2 R3.04
3 R7.04
4 R1.82

13 Eddis Enterprises has an EBIT of R200 000, an interest expense of R50 000, a preference share dividend of R4 000 and a tax rate of 29%. The firm's degree of financial leverage at the above level of EBIT is …

1 1.25
2 1.39
3 1.50
4 1.75

14 As a result of financial leverage, a firm is expecting a 10% increase in earnings before interest and taxes (EBIT), a 40% increase in earnings per share (eps) and a 20% increase in their ordinary share price (P_o). The firm's degree of financial leverage is ...

1 0.4
2 2.0
3 4.0
4 8.0

15 A firm has fixed operating costs of R4 500, the selling price per unit is R12, and its variable cost per unit is R7. The firm's break-even point in units is ...

1 375
2 643
3 900
4 6 000

16 According to the residual theory of dividends, if the firm's equity need exceeds the amount of retained earnings, the firm would…

1 borrow to pay the cash dividends
2 sell additional shares to pay the cash dividends
3 pay no cash dividends
4 have no need to consider its dividend policy

17 A firm has an optimal capital structure of 50% debt and 50% equity. The 2004 investment budget totals R2 500 000. If the 2003 retained earnings are R1 200 000 and the firm follows the residual theory of dividends, how much would it pay in dividends?

1 R 0
2 R 200 000
3 R 600 000
4 R 650 000

18 A firm has current after-tax earnings of R1 000 000 and declared a cash dividend of R400 000. The firms` dividend payout ratio is …

1 30.5%
2 35.0%
3 40.0%
4 60.0%

19 In the case of an acquisition, if the P/E paid is greater than the P/E of the acquiring company, the effect on the earnings per share of the acquired company will be ...

1 negative
2 positive
3 neutral
4 uncorrelated

20 The overriding goal for merging is to …

1 increase cash flows
2 maximise shareholder wealth as reflected in the acquirer`s share price
3 maximise shareholder wealth as reflected in the share price of the target firm
4 maximise operating efficiency

SECOND SEMSTER ASSIGNMENTS

<u>ASIGNMENT 01</u>

UNIQUE NUMBER: 652388
DUE DATE: 21/08/2009

ASSIGNMENT 01 <u>COMPULSORY</u>

1 Each of the following statements is correct **excep**t …

1 an annuity is a stream of equal annual cash flows
2 independent projects means the acceptance of one project eliminates the others from consideration
3 capital rationing means the firm only has a limited amount of financing available for capital expenditure
4 a conventional cash flow pattern is one which involves an initial investment, followed by a series of cash inflows

2 When evaluating a new project, which of the following factors should the firm consider?

1 Changes in net working capital investment attributable to the project.
2 The current market value of any equipment to be replaced.
3 The resulting difference in depreciation expense if the project involves replacement.
4 All of the above should be considered.

3 Relevant cash flows the…

1 incremental after-tax cash outflow and the resulting cash inflows
2 operating cash inflows
3 terminal cash flows
4 sunk costs

4 A project with a conventional cash flow pattern exhibits all of the following **except** …

1 operating cash inflows
2 a terminal cash inflow
3 operating cash outflows
4 initial investment

5 When the net present value is positive, the internal rate of return is … the cost of capital.

1 greater than
2 greater than or equal to
3 less than
4 equal to

6 A company has decided to replace an existing machine with a newer model. The old machine had an initial purchase price of R140 000 with R14 000 installation costs and has R90 000 in accumulated depreciation. If a 29% tax rate applies and the old machine can be sold for R50 000, what will the tax effect of the replacement be?

1 Loss of R4 060.
2 Benefit of R4 060.
3 Loss of R6 000.
4 Benefit of R6 000.

7 Greenyard Ltd faces a replacement decision and intends purchasing new equipment for R500 000. The cost of installation will be R50 000. The proceeds from the sale of the present equipment is expected to be R150 000 and the tax on the sale of the present equipment will be R50 000. The investment requires an increase of R30 000 in inventory and R40 000 in accounts receivable. The initial investment equals…

1 R330 000
2 R440 000
3 R460 000
4 R520 000

8 Capital budgeting is the process used to…

1 evaluate the profitability, liquidity and solvency of the firm
2 determine the minimum rate of return a firm must earn in order to maintain its market value
3 determine if cash inflow will exceed cash outflow over the next three months
4 evaluate and select long-term investments consistent with owner wealth maximization

9 Profit before taxes for Stonewall Ltd is expected to be R500 000 per year over the next four years. Depreciation will be R20 000 per annum. The firm is subject to a 29% tax rate. The firm's operating cash inflows for each year equals …

1 R325 000
2 R360 800
3 R375 000
4 R520 000

10 A firm made an initial investment of R400 406. The firm's cost of capital is 10% and the net annual cash inflow is expected to be R140 000 per annum for five (5) successive years. The net present value of the investment is approximately …

1 R 40 406
2 R110 594
3 R130 304
4 R180 334

11 Typec Ltd has R1 000 000 available for capital projects, a cost of capital of 15% and is considering the following projects:

Project	**Initial investment**	**IRR**	**NPV**
A	R500 000	22%	R300 000
B	R200 000	18%	R200 000
C	R300 000	16%	R150 000
D	R290 000	16%	R180 000
E	R300 000	10%	-R 50 000

In order to optimise its capital budget, the firm should combine the following projects:

1 A, B and C
2 A, B and D
3 A, B and E
4 B, C and D

12 Equipment can be sold at the end of five year for R9 000. The equipment is expected to have a book value of R9 000 upon termination. Net working capital of R4 150 will be recovered. The firm is subjected to a tax rate of 29%. The terminal net cash inflow is expected to be…

1 R 4 850
2 R10 000
3 R13 150
4 R16 300

13 Dickson Ltd will purchase equipment worth R98 100. Installation costs will amount to R60 000. Depreciation will be written off over a five year period using the straight line method. If the maximum acceptable payback period is 2 years, what will the required net profit per annum have to be?

1 R30 000
2 R39 330
3 R47 430
4 R52 200

14 Mega Manufacturers has evaluated the viability of an investment. The firm should make the investment if the …

1 PB is greater than one
2 IRR is less than the required return
3 PI is less than one
4 NPV is greater than zero

15 The present value of the cash flows of an investment is expected to total R115 000. The profitability index (PI) is 0.85. The initial investment is…

1 R135 294
2 R140 000
3 R160 234
4 R230 000

16 Some firms use the payback period as a decision criterion as a supplement to sophisticated decision techniques because…

1 it explicitly considers the time value of money
2 it can be viewed as a measure of risk exposure
3 the determination of payback is an objectively determined criteria
4 it can take the place of the net present value

FOR QUESTION 17 AND 18 REFER TO THE FOLLOWING INFORMATION:

Plastics Industries has undertaken a project with an initial investment of R150 000. The project will be depreciated to a book value of zero over its 3 years of usable life using straight-line method. The project will be terminated at the end of 3rd year for a scrap value of R88 000. The cost of capital is 12%. Assume a 29% tax rate.

The project is expected to generate the following cash inflows:

Year	Cash inflows
1	R50 000
2	R65 000
3	R90 000

17 The NPV of the project is closest to...

1 R13 359
2 R15 672
3 R26 997
4 R54 992

18 The IRR of project Alpha is closest to…

1 6.80%
2 9.41%
3 14.20%
4 28.55%

19 If account receivable increase by R1000, inventory decreases by R500 and accounts payable increase by R500, net working capital would…

1 decrease by R500
2 increase by R1 500
3 increase by R2 000
4 show no change

20 Mergers are undertaken for either strategic or financial reasons. Which of the following statements aptly describe a strategic merger?

1 The acquirer wishes to sell off certain unproductive or non-compatible assets to improve cash flow.
2 The acquirer seeks to achieve various economies of scale.
3 The acquirer seeks to restructure the company with a view to unlock hidden value.
4 All of the above.

ASSIGNMENT 02

UNIQUE NUMBER: 554171
DUE DATE: 25 September 2009

ASSIGNMENT 02 COMPULSORY

1 A company's ordinary shares are shown in its balance sheet at …value.

1 market
2 par
3 premium
4 liquidation

FOR QUESTION 2 AND 3 REFER TO THE FOLLOWING INFORMATION:

Young Ltd financed 60% by equity and 40% by debt. The firm expects that it will exhaust retained earnings of R200 000 (k_r = 14%) and will have to issue additional new ordinary shares (k_n = 16%) to meet its financing needs. The firm will be able to raise R240 000 by means of debt financing (k_i = 7.8%); additional debt can be obtained at k_i = 8.45%.

2 The breaking point of equity for Young is closest to…

1 R 200 000
2 R 333 333
3 R 560 650
4 R1 000 000

3 The breaking point of debt for Young is …

1 R 200 000
2 R 400 000
3 R 600 000
4 R1 000 000

4 Eskom debentures with a coupon interest rate of 16% and par value of R1000 each were sold at a face value each. The debentures have a 10 year life. The approximate before tax cost of debt is…

1 16.00%
2 16.50%
3 16.90%
4 17.36%

5 Spectra Ltd is considering issuing 2 million 10% preference shares which are expected to sell at R2.50 each. Flotation costs will be 50 cents per share. The cost of preference shares is …

1 8.3%
2 10.0%
3 12.5%
4 30.0%

6 The ordinary shares of Mecca Ltd are trading at R48 each on the Johannesburg Securities Exchange (JSE). The company paid a dividend (D_o) of 40 cents per share. The growth rate (g) in dividends is 10%. Mecca's cost of ordinary shares is closest to…

1 8.9%
2 10.9%
3 12.9%
4 13.4%

7 The before-tax cost of debt for a 20 year, 9% R1000 par value debenture selling at R950 is ...

1 8.92%
2 9.57%
3 10.63%
4 11.39%

8 Cartridge Manufacturers has determined its capital structure which comprises the following:

Form of capital	**Amount**	**After-tax cost**
Share capital	R25 000	
Reserves	R48 900	
Shareholders equity	R73 900	14%
Preference shares (10%)	R19 400	
Debt	R14 300	12%

The weighted average cost of capital is…

1 10%
2 11%
3 13%
4 22%

9 Steelpipe Ltd has achieved an EBIT of R40 000. The firm's required rate of return (K_s) is 10% and the firm is subjected to a 29% tax rate. The firm's value is estimated to be closest to…

1 R146 000
2 R284 000
3 R300 400
4 R354 000

10 Which *one* of the following statements is *correct*?

1 The greater the financial leverage, the lower the operating leverage.
2 The greater the operating leverage, the lower the operating risk.
3 Financial leverage can lower the weighted average cost of capital.
4 Debt financing reduces the variable cost per unit.

11 Fixed financing costs include ...

1 interest expenses
2 interest and depreciation expenses
3 interest expense and preference dividends
4 interest costs, preference dividends and dividends on ordinary shares

12 Abola Ltd's capital structure currently consists of a long-term loan of R950 000 at an interest cost of 12% per year, 25 000 preference shares with a dividend of R4 per share, and 300 000 ordinary shares on which a dividend of 50c per share was paid during the year, If the company's effective tax rate is 30%, calculate the company's financial break-even point.

1 R114 000
2 R256 857
3 R364 000
4 R471 143

13 A firm expects to have a 15% increase in sales over the coming year. If it has operating leverage equal 1.25 and financial leverage equal 3.50, then what will be the percentage change in earning per share?

1 15%
2 30%
3 47%
4 66%

14 The basic shortcoming of the EBIT-EPS approach to capital structure is ...

1 that it is difficult to calculate
2 it's disregard for the firm's dividend payout ratio
3 that it concentrates on EPS maximisation instead of owners' wealth maximisation
4 it's disregard for the firm's retained earnings

15 According to the residual theory of dividends, if the firm's equity need exceeds the amount of retained earnings, the firm would…

1 borrow to pay the cash dividend
2 sell additional stock to pay the cash dividend
3 pay no cash dividends
4 not need to consider its dividend policy

16 The dividend policy must be formulated considering two basic objectives, namely...

1 delaying the tax liability of the shareholder and maximising shareholder wealth
2 delaying the tax liability of the shareholder and providing information content
3 maintaining liquidity and minimising the weighted average cost of capital
4 providing for sufficient financing and maximising shareholder wealth

17 The clientele effect refers to …

1 the relevance of dividend policy on share value
2 the firm's ability to attract shareholders whose dividend preferences are similar to the firm's dividend policy
3 the information content of dividends
4 the "bird-in-the-hand" argument

18 Use the following information to calculate the missing probability of occurrence and expected annual rate of return:

Probability of occurrence	**Rate of return**
20%	14%
?	16%
10%	25%

1 13.5%
2 13.9%
3 14.4%
4 16.5%

19 Ordinary shares in Mvela Ltd is priced so that if provides a return of 15% per annum. If the share's beta is 0.85 and the expected market return is 14% per annum, what is the risk-free rate?

1 8.33%
2 8.75%
3 9.23%
4 20.66%

20 Barloworld Ltd has issued a convertible debenture with a par value of R100 000 and it is convertible into 5 000 ordinary shares. An ordinary share of Barloworld Ltd trades for R21. The conversion ratio is ...

1 20
2 4 762
3 5 000
4 20 000

ASSIGNMENT 03

Please note that this is a self evaluation assignment and aims to evaluate your understanding of investment and financing decisions. You need not submit any answers. After you have attempted the assignment compare your answers against the suggested solutions in Annexure 2.

QUESTION 1 **(15 Marks)**

After thorough research, Putco Ltd has decided to purchase a new ticket-sales machine. The agency projects ticket sales for the new machine to be 60 000 every year for five years. The total installed costs of the new ticket machine amount to R2 900 800.

The total fixed costs are R400 000 per year, the variable costs are R15 per ticket, and the tickets are sold at R80 per ticket. The ticket-sales machine is to be depreciated according to the straight-line method over seven years, but will have to be replaced in five years to sustain profitable inventory levels.

The ticket-sales machine can be sold for 30 percent of its initial installed costs. The cost of capital is 14 percent. Income and capital gains are taxed at 29%.

REQUIRED

(a) Calculate the estimated net cash flow for the new ticket-sales machine.

(b) Calculate the terminal cash flow for the new ticket-sales machine

(c) State whether, in the light of the net-present value (NPV) and internal rate of return (IRR) decisions criteria, the new machine should be purchased. **Justify your answer.**

QUESTION 2 **(15 Marks)**

Vuvuzela Manufacturers aim to expand production capacity by investing R14 million in the new plant and machinery for the 2010 world cup.

The management of Vuvuzela wants to maintain the present 40% debt in the firm's capital structure. The company expects to have net income of R2.8 million and bases it's dividend payments on the residual policy.

Debt financing may be obtained at a before-tax cost of 16%. Ordinary shares, which are currently selling for R30 a share, may be issued to net R20 after flotation costs.

The firm paid a dividend (Do) of R1.50 per share in the previous financial year and had a growth rate of 7% over the past few years. It is expected that this growth rate will be maintained in future. The tax rate is 40%.

REQUIRED

(a) Identify the various forms and amounts of new financing required for the project.
(b) Calculate the component costs.
(c) Calculate the weighted average cost of capital that should be used for the expansion.

QUESTION 3 **(15 Marks)**

The Starbuck Company' optimal capital structure calls for 40% debt and 60% equity. The interest rate on its debt is a constant 12%; its cost of ordinary shares funding from retained earnings is 16%; and its marginal tax rate is 29%. Starbuck has the following opportunities:

Project A: Cost = R40 000; IRR = 18%.
Project B: Cost = R40 000; IRR = 16%.
Project C: Cost = R40 000; IRR = 13.4%.

Starbuck expects to have net income of R120 000 and basis its dividend payment on the residual policy.

REQUIRED

(a) Which projects should Starbuck company chose? **Justify your answer**.
(b) How much would Starbuck pay in dividends if it follows the residual theory of dividends?
(c) Calculate Starbuck Company's payout ratio.

ANNEXURE 2: ANSWERS TO ASSIGNMENT 03

QUESTION 1 Putco Ltd

(a) Net cash flow

Sales	(60 000 x R80)	R4 800 000
Less : variable costs	(60 000 x R15)	R 900 000
:fixed costs		R 400 000
:depreciation		R 414 400*
EBIT		R3 085 600
Less: Tax@29%		
EAT		R2 190 776
Add: depreciation		R 414 400
Operating cash flow		R2 605 176

*R2 900 800/7 = R414 400

(b) Terminal cash flow

Proceeds from sales	(R2 900 800 x 0.30)	R870 240
Less: capital tax gain		R 12 018*
Terminal cash flow		R858 222

*Sales	R870 240
Less book value (R2 900 800 - R2 072 00*)	R828 800
Capital gain	R 41 440
Tax @29% (41 440 x 0.29)	R 12 018

*Accumulated depreciation 414 400 x 5 = R2 072 200

(c) NPV

Using the table R6488186.426
Using the calculator R6 488 713.760

IRR 87.01%

The new machine should be purchased because the NPV is positive and the IRR is greater than the cost of capital.

QUESTION 2 **Vuvuzela Manufacturers**

(a) Forms and amounts

Form	Amount
Debt	R 5 600 000
Retained earnings	R 2 800 000
New shares	R 5 600 000
Total	R14 000 000

(b) Component costs

Debt 16 X (1 – 0.40) =9.6%
Kr 1.50 (1 + 0.07)/ R30 + 0.07 = 12.35%
Kn 1.50 (1 + 0.07)/R20 + 0.07 = 15.025%

(c) WACC

Form	Amount	Weight	Cost %	WACC
Debt	R 5600 000	0.40	9.6	3.84
Retained earnings	2 800 000	0.20	12.35	2.47
New Shares	5 600 000	0.40	15.025	6.01
	14 000 000	1.0	WACC	12.32

QUESTION 03 Starbuck Company

(a) WACC

Equity	0.60 x 16%	=	9.60%
Debt	0.40 x 8.52*	=	3.40%
		WACC =	13.00%

*12 (1 – 0.29) = 8,52

Starbuck Company must choose all projects (A, B and C) because their IRR exceeds the WACC.

(b) Dividends to be paid

Starbuck needs R120 000 for projects A, B and C

Equity needed is R120 000 * 0.60 = R72 000

Dividends to be paid R120 000 – R72 000 = R48 000

(c) Payout ratio

R48 000/R120 000 = 40%

ANNEXURE 3: STUDY SKILLS

A revised and updated study skills guide entitled EFFECTIVE STUDY was published by the Bureau for Student Counselling and Career Development (BSCCD). It is available in English and it can be obtained from Unisa Press (see details below). The publication deals with a variety of topics which are applicable to specific periods during the semester or year. It also contains a screening questionnaire, which will indicate to students where they may expect problems and on which areas they should focus. The topics covered in the book are as follows:

INTRODUCTION

1 The EFT study process

THE EXPLORATION PHASE

2 Assessing the study process
3 Creating a quality environment for effective study
4 Effective time management and planning
5 The organisation and running of study groups
6 Writing assignments and reports
7 Reading and note taking

FIXATION

8 Making the most of your memory: hinking and learning successfully
9 Dealing with multiple-choice questions

TESTING

10 Effective examination techniques
11 Academic anxiety
12 Assessing the effectiveness of the study process

To gain maximum advantage from the guidelines given in the publication, we suggest that you work through the book at the beginning of your studies. After this initial overview, you can consult the sections selectively as your needs emerge. The publication can be used repeatedly by both first-year and experienced students, as it was not only written for students with study problems. Successful students can use the guidelines to improve their academic performance even further.

How to obtain Effective Study?

Title: Van Schoor, WA, Mill, EM, & Potgieter, D. 2001. Effective study. Pretoria: Unisa Press.

To order: You can order the booklet from Unisa Press. Only prepaid orders will be accepted. If you want to buy a copy over the counter you can pay a visit to the sales section of Unisa Press, Department of Despatch, 2nd floor, Cas van Vuuren Building on the main campus.

Price R22-90 (R30-00 from 1 October 2003).
For telephone enquiries: (012) 429-3448
Fax: (012) 429-3221

The Bureau for Student Counselling and Career Development is available for consultations on study problems. In the past we have found that the consultations were more effective if a student is able to identify his/her specific study problems beforehand. We therefore suggest that you consult the publication and make notes of your specific problems.

You can contact the Bureau for Student Counselling and Career Development as follows:

In writing:
The Director
Bureau for Student Counselling and Career Development
PO Box 392
Unisa
0003

In person
You do not need to make an appointment as it is a walk-in service.
Cas van Vuuren Building 3-10 or 3-11
Main Campus
Office hours: Mon - Fri: 08:00 - 15:30
(See also the reference to the regional centres below)

Telephone: (012) 429-3513
Fax: (012) 429-3698
E-mail: counselling@unisa.ac.za

Services offered by the Bureau for Student Counselling and Career Development

For a comprehensive description of the services offered at the Main Campus and at the Regional Centres, you can visit the web page of the Bureau for Student Counselling and Career Development at: https://my.unisa.ac.za/counselling/

Regional centres

Centre	Person	Contact numbers
Western Cape – Parow	Ms Sonja Barnard	(021) 936 4130 barnase@unisa.ac.za
KwaZulu-Natal – Durban	Ms Amy Reddy	(031) 3351745 reddya1@unisa.ac.za
Limpopo – Polokwane	Ms Mmemeru Lephondo	(015) 2903441 lephomj@unisa.ac.za
Johannesburg Learning Centre	Ms Pam Nielson	(011) 4037111 nielspg@unisa.ac.za

PEER HELP PROGRAMME

We would like to inform you about the Unisa Peer Help Volunteer Programme, offered under the auspices of the Bureau for Student Counselling and Career Development.

Peer helping is based on the well-documented fact that students often seek out other students for help when they are experiencing some frustration, concern, worry or problems.
Peer helpers are trained to help other students think through and reflect on problems they might experience. These peer helpers listen and support their fellow students with regard to studies and personal problems. They explain the Unisa system and they render support regarding academic skills development. Peer helpers are trained to refer more complex cases to the professional counsellors on campus.

You can contact a peer helper at:

Main Campus (Pta) Cas van Vuuren Building Hall A Room 3-11 Tel: (012) 429-8694/5	Times Monday - Fridays 08:00 - 15:30
Western Cape Campus Unisa A Room G1-35 15 Jean Simonis Street Parow Tel: (021) 936-4130	Times Monday - Thursdays 09:00 - 15:00
Kwazulu Natal Campus Room 1B-7 Masifunde Study Centre Durban Tel: (031) 335-1745	Times Monday - Friday 08:00 - 13:00 Certain Saturdays 08:00 - 12:00
Limpopo Campus 23 Landdros Mare Street Polokwane Tel: (015) 290-3441	Times Monday - Friday 10:00 - 15:00
Johannesburg Learning Centre Room 206 cnr De Korte & Eendracht Street Braamfontein Tel: (011) 403-7111	Times Monday - Friday 09:00 - 15:00 Saturday by appointment 09:00 - 13:00