**MAC2602 – 2013 ASSIGNMENT 1 OF 2ND SEMESTER**

1. Benefits of a Mission Statement
   - It reveals the area in which the organisation is operating
   - It enables communication of a common culture throughout the organisation
   - It describes what the organisation is about
   - It gives a guiding philosophy about the direction an organisation should take

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Vision Statement = Presents a clear view of the organisation's future opportunities and challenges

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2. Pricing Strategy as an Organisations Competitive Strategy
   - Setting a low price for a product or service in order to gain market share
   - Selling their product or service in a different market and at a different selling price
   - Setting the selling price for a product or service eon the perceived value to it's clients
   - Maximises short-term profits by setting high selling prices for it's unique products

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3. Statements
   - A company's customers are always a key stakeholder
   - Banks are concerned with the security of loans and the compliance to loan agreements
   - Large institutional shareholders have a high level of interest in an organisation
   - Pressure groups can harm the company's public image and threaten it's existence

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4. Disadvantages of sole proprietorships and partnerships.

- The funds available for the activities of the business are limited to the combined funding of the partners.
- The continued existence can be limited.
- Ownership is not easily transferable because a new partnership must be formed when a partner wants to exit the partnership.
- The owner is personally responsible for all the debts incurred by his/her business.

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Advantage of a partnership

- The formation of a partnership is easy and inexpensive because no specific act or law regulates it.

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The sole proprietorship ceases to exist when the owner dies

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5. Entrepreneurial, functional, holding and divisionalised are all stages in Growth stages in the structure of an organisation

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6. The balanced scorecard reports performance measures across four dimensions, namely financial, customer, internal business processes and learning and growth.

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7. A set of processes, customs, policies, laws and institutions affecting the way that a business is managed, and includes the relationships among the many stakeholders involved with an organisation and the goals of the business is known as? Corporate governance

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8. The functions of strategic financial management include amongst others:
   - The allocation of scarce capital resources among competing opportunities.
   - Identification of possible strategies capable of maximising the net present value of the organisation.
   - The implementation and monitoring of the chosen strategy to achieve stated objectives.

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Corporate governance. = Compliance with laws, rules, codes and standards.

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9. An amount of R5 000 is invested now at a rate of 8% per annum. What will be the value of the investment after 5 years, if simple interest is added once at the end of the period?

**Simple interest calculation**
Principal amount R5 000
Plus the interest for the five years (R5 000 x 0,08 x 5) R2 000
Future value **R7 000**

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10. If a single amount of R12 000 is invested at 8% per annum with interest compounded quarterly, the amount to which the principal will have grown by the end of year 3 is approximately _____?

    [Round your workings to four decimal places and your final answer to the nearest rand.]

    **= R15 218 by using the Compound Interest Calculation**

**Compound interest calculation**

Three years is equal to 12 quarters, (3 x 4) at an interest rate of 2% per quarter (8%/4)

$$\text{Periodic rate } (i_{PER}) = \frac{i_{Nom}}{n}$$

$$\text{Periodic rate } (i_{PER}) = \frac{0{,}08}{4}$$

$$= 0{,}02\% \text{ per month}$$

$$\text{Effective interest rate} = \left[1 + \left(\frac{i}{n}\right)\right]^{n} - 1$$

Where $\frac{i}{n}$ = periodic rate

EAR = $(1 + 0{,}02)^{12} - 1{,}0$

= $(1{,}02)^{12} - 1{,}0$

= 1,2682 - 1,0

= 0,2682

= 26,82%

| | | |
|---|---|---|
| Principal amount | | R12 000,00 |
| Plus the interest | (R12 000 x 26,82%) | R 3 218,40 |
| Future value | | R15 218,40 |

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11. What is the present value of R2 000 payable in 2 year"s time, if the interest rate is 7% per annum, compounded annually?

[Round your workings to four decimal places and your final answer to the nearest rand.]

**= R1 747** by using Present value (single payment)

**Present value (single payment)**

$$PV = \left[\frac{FV}{(1+i)^n}\right]$$

Where FV = Future value

PV = Present value

i = Interest rate

n = Number of years or periods

$$PV = \left[\frac{FV}{(1+i)^n}\right]$$

$$= \left[\frac{R2\,000}{(1+0{,}07)^2}\right]$$

$$= \left[\frac{R2000}{1{,}1449}\right]$$

= R1746,8775 (rounded to the nearest rand)

= R1 747

12. An annuity pays R12 000 at the end of each year until the death of the purchaser. Assuming interest is compounded at 6% per annum, what is the present value of the annuity if the purchaser lives for 20 years

**<u>= R137 639</u> by using PV Annuity**

$$\text{PV annuity} = I \times \left[ \frac{1 - \frac{1}{(1+i)^n}}{i} \right]$$

$$= \text{R12 000} \times \left[ \frac{1 - \frac{1}{(1+0{,}06)^{20}}}{0{,}06} \right]$$

$$= \text{R12 000} \times \left[ \frac{1 - \frac{1}{(1{,}06)^{20}}}{0{,}06} \right]$$

$$= \text{R12 000} \times \left[ \frac{1 - \frac{1}{3{,}2071}}{0{,}06} \right]$$

$$= \text{R12 000} \times \left[ \frac{1 - 0{,}3118}{0{,}06} \right]$$

$$= \text{R12 000} \times \left[ \frac{0{,}6882}{0{,}06} \right]$$

$$= \text{R12 000} \times 11{,}4699$$

$$= \text{R137 639}$$

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13. <u>The following statements regarding time value of money were made:</u>
    - If each payment occurs at the beginning of the period rather than at the end of the period then we have an annuity due.
    - Time value of money calculations are also called discounted cash flow analysis.

    **Interpolation** = Extrapolation is the method by which a rate that lies between two specific rates, can be calculated.

    **Extrapolation** = Interpolation is the method by which a rate that lies outside two specific rates, can be calculated.

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14. Your friend, Lebo has asked you to calculate the effective interest rate per annum if a nominal rate of 8% per annum is charged quarterly.
What is the effective annual interest rate?
[Round the final interest rate to two decimal places]

**= 8,24% using Effective Interest Rate Method**

Effective rate

$$\text{Effective interest rate} = \left[1+\left(\frac{i}{n}\right)\right]^{n} - 1$$

$$= \left[1+\left(\frac{0{,}08}{4}\right)\right]^{4} - 1$$

$$= (1 + 0{,}02)^{4} - 1{,}0$$

$$= (1{,}02)^{4} - 1{,}0$$

$$= 1{,}0824 - 1{,}0$$

$$= 0{,}0824$$

$$= 8{,}24\%$$

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15. Ms Singh has approached her bank for a loan of R300 000 to start her own business. The bank wants to calculate the yearly rate to quote for this loan, with interest being compounded monthly. The effective annual rate on loans of this kind is 13,5%.
Which one of the following alternatives, represent the nominal interest rate per annum that the bank should quote to Ms Singh?
[Round the final interest rate to two decimal places.]

**= 12,73% p.a. using Nominal Rate Formula**

$$\text{Nominal rate} = n\left[(1 + i)^{1/n} - 1\right]$$

$$= 12\left[(1 + 0{,}135)^{1/12} - 1\right]$$

$$= 12\left[(1{,}135)^{0{,}0833} - 1\right]$$

$$= 12\left[1{,}0106 - 1\right]$$

$$= 0{,}12730$$

$$= 12{,}73\% \text{ rounded off}$$

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16. Calculate the nominal interest rate to be charged half yearly on a loan in order to render an effective interest rate of 22% per annum.
[Round off the final interest rate to two decimal places.]
The half yearly nominal interest rate is _____?
**= 10,46%**

$$\text{Nominal rate} = n\left[(1+i)^{1/n} - 1\right]$$
$$= 2\left[(1+0{,}22)^{1/2} - 1\right]$$
$$= 2\left[(1{,}22)^{0{,}5} - 1\right]$$
$$= 2\left[1{,}1045 - 1\right]$$
$$= 2\left[0{,}1045\right]$$
$$= 20{,}91\% \text{ per annum}$$

$$\text{But charged half yearly } \frac{20{,}91}{2}$$
$$= 10{,}46\%$$

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17. When the effective interest rate earned on an investment is less than the **Inflation rate**, the investor will lose wealth in terms of the purchasing power of the money that was invested. This is because the present value (purchasing power) of the future or maturity value will be less than the original amount invested.

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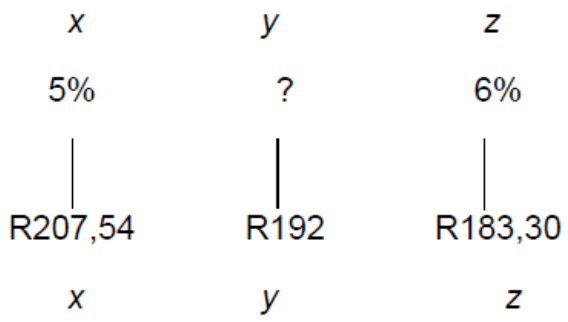
18. You have calculated the present value of a future amount to be R207,54 by using a discount rate of 5% and a present value of the same future amount to be R183,30 by using 6% as the discount rate.
By using interpolation calculate the discount rate that will achieve a present value of R192,00.
[Round your final answer to two decimal places.]
**= 5,64%**

By using Interpolation

Interpolation




$$= a + \left[\frac{x-y}{x-z} \times (b-a)\right]$$

$$= 5\% + \left[\frac{207{,}54 - 192}{207{,}54 - 183{,}30} \times (6\% - 5\%)\right]$$

$$= 5\% + \left[\frac{15{,}54}{24{,}24} \times 1\%\right]$$

$$= 5\% + 0{,}6411$$

$$= 5{,}6411\%$$

$$= 5{,}64\%$$

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19. While sitting in the library a fellow student has asked you for help with the following question that he is working on: A company takes out a bank loan of R110 000 at 8% per annum on the 1st of January. The company will pay back the loan over 3 years in equal quarterly payments. The student wants to know which interest factor he should use in order to calculate the loan payments for each quarter.

Which table and factor will you advise him to use in his calculation.
**Table B - 10,575**
To calculate the quarterly payments to the bank
(8%/4 = 2%) for (3 x 4 = 12 periods) - Table B
**= 10,575**

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20. What are the quarterly payments for a loan of R800 000 bearing interest of 16% per annum, repayable in equal quarterly payments for the next 10 years.

[Allow for a slight rounding difference and choose the alternative that is the closest to your answer.]

**Loan repayment**
**16% pa, payable Quarterly = 16/4 = 4% per quarter**
**10 years = 10 x 4 = 40 periods**

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Using the mathematical formula:

$$I = \frac{\text{PV annuity x } i}{\left[1-\frac{1}{(1+i)^n}\right]}$$

$$I = \frac{\text{PV annuity x } 0{,}04}{\left[1-\frac{1}{(1+0{,}04)^{40}}\right]}$$

$$= \frac{\text{R800 000 x } 0{,}04}{\left[1-\frac{1}{(1{,}04)^{40}}\right]}$$

$$= \frac{\text{R800 000 x } 0{,}04}{\left[1-\frac{1}{4{,}8010}\right]}$$

$$= \frac{32\,000}{1-0{,}2083}$$

$$= \frac{32\,000}{0{,}7917}$$

$$= \text{R40 419,35}$$

$$= \text{R40 419 (rounded to the nearest rand)}$$

**OR**

Using the equation and factors from the appropriate table:

$$\text{Annuity/PMT} = \frac{\text{Present value}}{\text{Present value of R1 per period factor at 4\% for 40 periods}}$$

$$= \frac{\text{R800 000}}{19{,}793 \text{ (per Table B)}}$$

$$= \text{R40 418,3297}$$

$$= \text{R40 419 (rounded to the nearest rand)}$$

**MAC2602 – 2013 ASSIGNMENT 2 OF 2ND SEMESTER**

**QUESTION 1**
Print page 40 TL 101 & Page 3 & 4 & 5 TL 202

**QUESTION 2**
A family-owned business needs to raise funds to enable a new project to be undertaken. The main shareholders (family members) are not willing to increase their stake in the company and, they do not want to sell shares to new shareholders for fear of diluting their holdings.
**REQUIRED:**
Discuss the costs and benefits of the funding forms that could be used to obtain the funds as well as factors that should be taken into account when considering different forms of financing. (10)

**Costs and benefits of funding sources** (SG 1, p. 162 – 174)
Issue of ordinary shares:
The main shareholders do not wish to invest any more money in the business and also do not want to dilute their holding by inviting outsiders to acquire shares in the company. It is therefore not possible to raise additional funds by issuing ordinary shares.
Issue of preference shares:
The company could offer non-participating preference shares. The dividend offered on the preference shares might however need to be higher than the rate of interest that would be payable on debt. This can therefore increase the cost of capital for the company.
Increase debt:
Since the main shareholders (family) want to retain control of the company they will usually prefer to obtain funds by means of increasing the company's debt. The nature of the project will determine if the company will use either long-term or short-term debt. For a major project, it is likely that long-term debt would be more appropriate as it is unlikely that repayment of both the debt and the interest will be possible in the short-term.
- The company could issue debentures:

Debentures could have a restrictive agreement that restricts the freedom of the management with regard to the running of the company. Usually this restrictive clause controls the risk to which management may expose the company.
Debentures can be secured over a specific asset and if the company fails to pay interest or capital repayments, the debenture holders can force the sale of the assets that were offered as security.
Debentures present a lower risk to the lenders, they therefore require a lower return. The latter reduces the company's cost of debt financing and therefore it's cost of capital.
- Long-term loans:

A long term- loan could also be taken out. The terms will vary according to the lender's view of the company's credit risk.
Medium term financing in the form of leasing could be another method to consider.
**Factors that the company needs to take into account:**
(i) Availability of funds
(ii) The cost of the funds
(iii) The tax implications of the different methods of funding
(iv) The impact the new funding will have on the capital structure of the company

**QUESTION 3**
Print page 41 & 42 TL 101

Analysis and Interpretation of Vincenzi Ltd and Beech Ltd

a) Ratios:

1. **CURRENT RATIO** (SG 2, p. 30)

Current assets : Current liabilities

The current ratio is calculated for Vincenzi and Beech:

| | | Vincenzi | | Beech |
|---|---|---|---|---|
| Current assets : Current liabilities | = | 51 : 15 | = | 37 : 35 |
| | = | **3,4 : 1** | = | **1,06 : 1** |

2. **INTEREST COVER RATIO** (SG 2, p. 35)

$$\frac{\text{EBIT}}{\text{Interest expense}}$$

The interest cover ratio is calculated for Vincenzi and Beech:

| | Vincenzi | Beech |
|---|---|---|
| $\frac{\text{EBIT}}{\text{Interest expense}}$ | $\frac{\text{R50m}}{\text{R2m}}$ | $\frac{\text{R36m}}{\text{R6m}}$ |
| | = **25 times** | = **6 times** |

3. **DEBT TO EQUITY RATIO** (SG 2, p. 36)

Long-term interest bearing debt (including its current portion) : Shareholders' equity

The debt to equity ratio is calculated for Vincenzi and Beech:

| | | Vincenzi | Beech |
|---|---|---|---|
| $\frac{\text{Long term debt (including current portion)}}{\text{Shareholders equity}}$ | = | 16/110 | 37/65 |
| | | **14,55%** | **56,92%** |

OR Alternative at Market value

The debt to equity ratio is calculated for Vincenzi and Beech: (at market value)

| | | Vincenzi | Beech |
|---|---|---|---|
| $\frac{\text{Long term debt (including current portion)}}{\text{Shareholders equity}}$ | = | 16/480 | 37/144 |
| | | **3,33%** | **25,69%** |

4. **OPERATING PROFIT MARGIN** (SG 2, p. 23)

$$\frac{\text{Operating profit}}{\text{Revenue}} \times 100$$

The operating profit margin is calculated for Vincenzi and Beech:

| | | Vincenzi | Beech |
|---|---|---|---|
| $\frac{\text{Operating profit}}{\text{Revenue}} \times 100$ | | $\frac{\text{R 50m}}{\text{R150m}} \times 100$ | $\frac{\text{R36m}}{\text{R150m}} \times 100$ |
| | = | **33,3%** | = **24%** |

5. **RETURN ON EQUITY** (SG 2, p. 24)

$$\frac{\text{Net profit}}{\text{Equity}} \times 100$$

The ROE is calculated for Vincenzi and Beech: (based on equity as per statement of financial position)

| | | Vincenzi | Beech |
|---|---|---|---|
| $\frac{\text{Net profit}}{\text{Equity}} \times 100$ | | $\frac{\text{R 32m}}{\text{R110m}} \times 100$ | $\frac{\text{R20m}}{\text{R65m}} \times 100$ |
| | = | **29%** | = **31%** |

The calculation based on book values will however not be based on opening balances or average basis as on p.25 of SG 2 since we did not supply information for the different opening and closing balances for each company.
Due to the format of the information supplied, the book value calculation will be based on the principle that:

Total assets = Equity + liabilities

Restated as

Equity = Assets – liabilities

Vincenzi equity = R141m – (R9m + R6m + R16) = R141m – R31m = R110m

Beech equity = R137m – (R10m + R25m + R37) = R137m – R72m = R65m

Or you could have added share capital and retained income to get total equity.

Vincenzi equity = R60m + R50m = R110m

Beech equity = R60m + R5m = R65m)

OR (Alternative)

The ROE is calculated for Vincenzi and Beech: (based on market values)

| | | Vincenzi | Beech |
|---|---|---|---|
| $\frac{\text{Net profit}}{\text{Equity}} \times 100$ | | $\frac{\text{R 32m}}{\text{R480m}^*} \times 100$ | $\frac{\text{R20m}}{\text{R144m}^{**}} \times 100$ |
| | = | **6,67%** | = **13,89%** |

(* R120m x R4 = R480m)(** R120m x R1,20 = R144m)

You could use book values or market values as we did not specify. We did include the share prices of both Vincenzi and Beech so you could calculate the market values of each company and therefore the ROE of each based on market values as well.

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6. **INVENTORY TURNOVER RATIO** (SG 2, p. 32)

$$\frac{\text{Cost of sales}}{\text{Inventory}}$$

The inventory turnover rate is calculated for Vincenzi and Beech:

| | Vincenzi | Beech |
|---|---|---|
| $\frac{\text{Cost of sales}}{\text{Inventory}}$ | $\frac{\text{R 80m}}{\text{R30m}}$ | $\frac{\text{R 90m}}{\text{R24m}}$ |
| | **= 2,67 times** | **= 3,75 times** |

7. **RECEIVABLE DAYS** (SG 2, p. 32 - 33)

$$\frac{\text{Receivables}}{\text{Credit sales}} \times 365 \text{ (or x 12 if months are used)}$$

The receivable days ratio is calculated for Vincenzi and Beech (Ignoring VAT):

| | Vincenzi | Beech |
|---|---|---|
| $\frac{\text{Receivables}}{\text{Credit sales}} \times 365$ | $\frac{\text{R 15m}}{\text{R150m}} \times 365$ | $\frac{\text{R 12m}}{\text{R150m}} \times 365$ |
| | **= 36,5 days** | **= 29,2 days** |

We did not supply any information regarding the VAT percentage and whether VAT was included in the "receivables". It was stated that all sales (100%), was credit sales.

In this case where we did not mention a VAT percentage that is applicable you could have ignored VAT and use the receivables as given and use the credit sales without adjusting it to include VAT.

Should you have assumed VAT at 14% (as is the case in South Africa) the receivable days calculation will be as follows:

The receivable days ratio is calculated for Vincenzi and Beech (VAT at 14%):

| | Vincenzi | Beech |
|---|---|---|
| $\frac{\text{Receivables}}{\text{Credit sales}} \times 365$ | $\frac{\text{R 15m}}{\text{R171m}^*} \times 365$ | $\frac{\text{R 12m}}{\text{R171m}} \times 365$ |
| | **= 32,0 days** | **= 25,6 days** |

* R150m x 1,14 = R171m

8. **PRICE/ EARNINGS RATIO** (SG 2, p. 42)

$$\frac{\text{Share price}}{\text{Earnings per share (EPS)}^*}$$

The price/earnings ratio is calculated for Vincenzi and Beech:

| | Vincenzi | Beech |
|---|---|---|
| $\frac{\text{Share price}}{\text{Earnings per shares (EPS)}}$ | $\frac{400}{26{,}70^*}$ | $\frac{120}{16{,}67^*}$ |
| | **= 14,98** | **= 7,19** |

* EPS = Net profit/number of shares
Vincenzi = R32m/120m = R0,2667 = 26,70 **cents**
Beech = R20m/120m = R0,1667 = 16,67 **cents**

9. **DIVIDEND COVERAGE RATIO** (SG 2, p. 41)

$$\frac{\text{Earnings per share (EPS)}}{\text{Dividend per share (DPS)}}$$

Where Dividend per share (DPS) for Vincenzi = 12/120 = R0,10 = 10 **cents**
Dividend per share (DPS) for Beech = 18/120 = R0,15 = 15 **cents**

The dividend coverage ratio is calculated for Vincenzi and Beech:

| | Vincenzi | Beech |
|---|---|---|
| $\frac{\text{Earnings per share (EPS)}}{\text{Dividend per share (DPS)}}$ | $\frac{26{,}7}{10}$ | $\frac{16{,}7}{15}$ |
| | **= 2,67 times** | **= 1,11 times** |

10. **DIVIDEND YIELD** (SG 2, p. 43)

$$\frac{\text{Dividend per share (DPS)}}{\text{Share price}}$$

The dividend yield ratio is calculated for Vincenzi and Beech:

| | Vincenzi | Beech |
|---|---|---|
| $\frac{\text{Dividend per share (DPS)}}{\text{Share price}}$ | $\frac{10}{400}$ | $\frac{15}{120}$ |
| | **= 2,5** | **= 12,5** |

b) Interpretation by comparison of the ratios of Vincenzi and Beech

1. Current ratio (Liquidity)

- This is the primary measure of an organisation's liquidity. Beech's liquidity position is considerably weaker than that of Vincenzi, 1,06:1 as opposed to 3,4:1 of Vincenzi. The latter implies that for Beach R1 of current liabilities are covered only by R1,06 of current assets. In the case of Vincenzi R1 of current liabilities are covered by R3,4 of current assets.

2. Interest cover (Solvency and financial/capital structure)

- This ratio shows how many times the operating profit will cover the interest expense. The high interest cover of Vincenzi of 25 times shows that it is much safer for them to borrow additional funds. Vincenzi's has lower financial risk, and more reserve borrowing capacity. Beech's operating profit only covers their interest expense 6 times, indicating that their gearing is relatively high. Beech will therefore not be able to significantly increase interest-bearing debt in their capital structure.

3. Debt to equity ratio (Solvency and financial/capital structure)

- The debt to equity ratio measures the level of financial risk. Beech has a very high ratio of 95, 4% indicating a higher financial risk borne by Beech's shareholders, this is evidenced by Beech's lower share price.

4. Operating profit margin (Profitability and performance)

- Vincenzi's profitability of 33,3% is better than Beech's of 24%.This can be ascribed to Beech's gross profit being lower and their operating costs being higher than those of Vincenzi.

5. Return on equity (Profitability and performance)

- Although Beech boasts a higher return on equity of 31% compared to that of Vincenzi at 29%, this is only because of Beech's higher gearing. The higher return on equity is not an adequate compensation for the increased financial risk borne by Beech's shareholders, this is evidenced by Beech's lower share price.

6. Inventory turnover ratio (Liquidity)

- Beech's higher inventory turnover of 3,75 times compared to that of Vincenzi's of 2,67 times suggests more efficient inventory management by Beech. The number of times Beech's inventory is sold or used in a year is thus more than that for Vincenzi. A low turnover rate is not good because the value of inventory tend to decline as they are in the warehouse for longer periods and inventory holding costs are higher.

7. Receivable days or debtor's collection period (Liquidity)

- Beech's receivable days (debtors collection period) of 29,2 days is shorter than that of Vincenzi at 36,5 days which suggests more efficient debtor's management by Beech. Vincenzi's higher period can represent a greater risk of becoming bad debt or irrecoverable.

8. Price/ earnings ratio (Financial market)

- This ratio express the relationship between the market price of the organisation's shares and its earnings per share. Beech's lower PE ratio of 7,19 is evidence of the market's lower estimation of their worth compared to the higher P/E ratio of Vincenzi at 14,98.

9. Dividend cover (Financial market)

- The dividend cover ratio measures the organisation's ability to pay its dividend payments to their shareholders. Vincenzi's dividend cover of 2,67 times indicates that they have little difficulty in paying their dividends. Beech's lower dividend cover of 1,11 times indicates a lower safety margin of the shareholder's dividend and since it is below 1,5 times it is risky.

10. Dividend yield (Financial market)

- The dividend yield measures the return from distributions that the organisations' shareholders will earn from their investments in relation to its share price. Beech's higher dividend yield of 12,5 shows a higher cash return to its shareholders. Vincenzi,s dividend yield of 2,5 shows a lower return on the investments of their shareholders in relation to the higher share price. Beech's higher dividend yield however is clearly outweighed by the lower risk and superior capital gains offered by Vincenzi's shares.

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**QUESTION 4**

SWOT analysis is a method of identifying strengths and weaknesses which requires assessing internal factors, and detecting opportunities and threats by assessing external factors.

**REQUIRED:**

Conduct a SWOT analysis on the following issues that could face an organisation:

a) Adequate financial resources

b) Entry of lower cost foreign competitors

c) Lack of managerial depth and talent

d) Weak distribution network

e) Rising sales of substitute products

f) Access to economies of scale

g) Good competitive skills

h) Vulnerability to a recession

i) Too narrow a product line

j) Product innovation skills

k) Adverse demographic changes

l) Plagued with internal operating problems

m) Expand product line to meet broader range of customer needs
n) Better manufacturing capability
o) Faster market growth

| **Strengths** | **Weaknesses** |
|---|---|
| • Adequate financial resources<br>• Access to economies of scale<br>• Good competitive skill<br>• Product innovation skills<br>• Better manufacturing capability | • Lack of managerial depth and talent<br>• Weak distribution network<br>• Too narrow a product line<br>• Plagued with internal operating problems |
| **Opportunities** | **Threats** |
| • Faster market growth<br>• Expand product line to meet broader range of customer needs | • Entry of lower cost foreign competitors<br>• Rising sales of substitute products<br>• Vulnerability to a recession<br>• Adverse demographic changes |

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**QUESTION 5**

An extracts from Tilley Limited's budget reveals the following:

| | June R'000 | July R'000 |
|---|---|---|
| Net Profit | | 60 |
| Closing stock | 25 | 30 |
| Closing debtors | 45 | 35 |
| Closing creditors | 17 | 20 |
| Depreciation | | 5 |
| Equipment purchases | | 40 |
| Positive cash balance | 15 | |

**REQUIRED**:

On the basis of these figures alone, calculate Tilley's budgeted cash balance at the end of July. (8)

**Answer:**
The information given is not sufficient to do the budget as we explained in the study material and you will not get such an advanced question on cash budgets in the exam. We will also not mark this specific question of this assignment.
However since the question states that "on the basis of these figures alone" you could have argued and assumed different scenarios with regard to creditors, debtors and stock.
One such scenario is that since there is a decrease of R10 000 in debtors from June to July, the company received the payments from debtors and that represents an INFLOW of cash.
On the other hand creditors (assume this is the bank from which the company received an overdraft or loan – NOTHING to do with stock which implies trade creditors, as stock is handled separately) increased by R3 000 from June to July. The latter will represent an INFLOW of cash.
The stock increased with R5 000 from June to July. The assumption can be made that cash was paid for the stock which means that there was an OUTFLOW of cash resulting in a deduction of the opening cash balance of R15 000. This means that the outflow of cash should be deducted from the opening cash balance.

The equipment purchases should also be regarded as cash OUTFLOW of R40 000 to pay cash for equipment (asset such as a machine) not stock, since this information is separate from that regarding the stock that was explained in the previous paragraph (above).

Tilley's budgeted cash balance at end July

| | July R |
|---|---|
| Opening balance | 15 000 |
| Plus: Net Profit | 60 000 |
| Less: Stock increase | (5 000) |
| Plus: Debtors decrease | 10 000 |
| Plus: Creditors increase | 3 000 |
| Plus: Depreciation | 5 000 |
| Less: Equipment purchase | (40 000) |
| Total cash balance | 48 000 |

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**QUESTION 6**

Magenta Ltd normally offers its customers 50 day payment terms, but to improve its cash flow it is considering a 2% discount for payment within 10 days. Magenta"s cost of capital is 16%.

**REQUIRED:**

Calculate and advise Magenta on whether this proposed action should be undertaken. Assume a 365 day year and an invoice of R10 000. (5)

You must picture the scenario for yourself. Magenta (you) want to improve your cash flow by getting your debtors to pay within ten days instead of 50 days. Alternatively you could have borrowed the money from lenders or banks at 16%. You will obviously choose the cheapest method to obtain the cash. In order to see which option (the 2% discount offered to your debtors or getting a loan) is the cheapest, you will calculate what it will cost you to give the 2% discount and compare it to the cost of the alternative option which you know the cost of, given to be 16%.

According to the calculations, the effective cost of the option of the discount is 20,23%. Ask yourself whether this is cheaper or more expensive than the cost of the other option – 16%. Remember to advise to take the cheapest option (with the lowest cost).

$$r_{NOM} = \frac{\text{Discount\%}}{100 - \text{Discount\%}} \times \frac{365 \text{ days}}{\text{Days credit outstanding} - \text{discount period}}$$

$$= \frac{2}{98} \times \frac{365}{50 - 10}$$

$$= 0{,}1862$$

$$= 18{,}62\%$$

$$EAR = [1 + \text{periodic rate}]^{n} - 1$$

$$= \left[1 + \left(\frac{2\%}{100\% - 2\%}\right)\right]^{365/40} - 1$$

$$= \left[1 + \left(\frac{2}{98}\right)\right]^{9{,}1250} - 1$$

$$= [1{,}0204]^{9{,}1250} - 1$$

$$= 1{,}2023 - 1$$

= 0,2023

= 20,23%

Notice that the implied effective annual rate is even higher than the nominal cost due to the effect of compounding.
Compared with Magenta's cost of capital of 16%, this new action should NOT be undertaken. (5)

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**QUESTION 7**
A house has recently been purchased for R800 000. Assuming that the house‟s value will increase by 6% bi-annually.

**REQUIRED:**
Calculate what the value of the house will be after 2 years. (2)

**Financial calculator:** (SG 1, p.123)

| | **SHARP EL-738** | | **Hp10BII** | |
|---|---|---|---|---|
| | Key in: | Display will read: | Key in: | Display will read: |
| **Clear all registers:** | 2ndF CA | 0.0000 | 2ndF C/CALL | 1 P/YR 0.0000 |
| **Number of periods**: | 4 N | 4.0000 | 4 N | 4.0000 |
| **Interest rate:** | 6 I/Y | 6.0000 | 6 I/YR | 6.0000 |
| **Present value of initial outflow:** | 800 000+/- PV | -800'000.0000 | 800 000+/- PV | -800,000.0000 |
| **Calculate (compute) the future value of inflow:** | COMP FV | 1'009'981.5680 | FV | 1,009,981.5680 |

The future value after two years is R1 009 982 (rounded to the nearest rand).

Or you could have used the **mathematical formula method** (SG 1, p. 86)

Formula: FV = $PV \times (1 + i)^n$

= $800\,000 \times (1 + 0{,}06)^4$

= 800 000 x 1,2625

= R1 009 982

Or you could have used the relevant equation and the **factor tables method**: (SG 1, p. 117)

Equation: FV = PV x Future value of R1-factor (Table C)

= 800 000 x Table C at 6% and 4 periods

= 800 000 x 1,2625

= R1 009 982

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**QUESTION 8**

An annuity of R15 000 is invested at the end of every year for 4 successive years at 10% p.a. interest, compounded annually.

**REQUIRED:**

Calculate the value of the annuity at the end of the fourth year. (2)

NB: Refer to the note at the onset of Question 7.

**Financial calculator**: (SG 1, p.124)

| | **SHARP EL-738** | | **Hp10BII** | |
|---|---|---|---|---|
| | Key in: | Display will read: | Key in: | Display will read: |
| **Clear all registers:** | 2ndF CA | 0.0000 | 2ndF C/CALL | 1 P/YR 0.0000 |
| **Number of periods**: | 4 N | 4.0000 | 4 N | 4.0000 |
| **Interest rate:** | 10 I/Y | 10.0000 | 10 I/YR | 10.0000 |
| **Present value of annuity/pmt:** | 15000+/- PMT | -15'000.0000 | 15000+/- PMT | -15,000.0000 |
| **Calculate (compute) the future value:** | COMP FV | 69'615.0000 | FV | 69,615.0000 |

The future value after four years is R69 615 (rounded to the nearest rand).

Or you could have used the **mathematical formula method** (SG 1, p. 87)

$$\text{FV annuity} = \text{I x } \left[\frac{(1+i)^n - 1}{i}\right]$$

$$= \text{R15 000 x } \left[\frac{(1+0{,}10)^4 - 1}{0{,}10}\right]$$

$$= \text{R15 000 x } \left[\frac{(1{,}10)^4 - 1}{0{,}10}\right]$$

$$= \text{R15 000 x } \left[\frac{1{,}4641 - 1}{0{,}10}\right]$$

$$= \text{R15 000 x } \left[\frac{0{,}4641}{0{,}10}\right]$$

= R15 000 x 4,6410

= R69 615,0000

= R69 615 (rounded to the nearest rand)

Or you could have used **the factor tables method:**

Decide on the equation to be used.SG1, p. 117)
Select equation **FV** = annuity x future value of R1 per period factor

FV = annuity x future value of R1 per period factor (Table D)
**=** R15 000 x 4,6410
= R69 615,0000
= R69 615 (rounded to the nearest rand)

Table D at 10% after 4 years = 4,6410

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**May / June 2013 Exam Question 5**

**Vision** = defines where the organisation wants to go in the future and presents a clear view of the future's opportunities and challenges

**Core values** = is the principles that guide an organisation by describing how every employee is expected to behave

**Strategic objective** = it clearly formulates measures of progress and targets to be achieved in a specific time frame

**Definition of Strategy** = it is about choosing long-term activities to achieve the purpose set out in the mission statement and ultimately moving towards realising the vision

**Primary Stakeholders *(have contractual relationship)***

- Internal Stakeholders
  - Managers
  - Employees
- Connected stakeholders
  - Shareholders / Owners
  - Banks and Lenders
  - Suppliers
  - Customers

**Secondary Stakeholders *(Do NOT have contractual relationship)***

- External Stakeholders
  - Government
  - Local Authorities
  - Professional Bodies
  - Pressure Groups
  - Community at large

**Porter's Five Forces Model**: The forces in the competitive environment determine the profitability of the industry because they influence the prices that can be charged and the cost that can be endured and affects the size of the investment that is required to compete in the industry


**SWOT Analysis**

- It defines core competencies of the organisation and builds on those strengths
- It identifies and analyse internal and external factors that are of strategic importance and classify them in opportunities, threats, strengths and weaknesses
- The key purpose is to create an organisation-specific business model that has identified the strategies that will synchronise the capacity and means of the organisation with the competitive environment in which the organisation operates

**Reasons why profit maximisation should not be the primary objective of organisations**

- Profit measures based only on accounting and financial indicators are annual measures measured over a short period of time
- Short-term profit measures do not distinguish between profit earned and cash flows generated
- Profit measures represented by accounting and financial indicators do not reflect the strategic behaviour employed to achieve it
- Profit measures do not take a change in risk into account

**Financial Management**

**Strategic Financial Management** entails the identification of possible strategies capable of maximising an organisation's net present value, the allocation of scarce capital resources among the competing opportunities and the implementation and monitoring of the chosen strategies so as to achieve stated objective

**Traditional Financial Management** is the management and control of money and money-related operations within the business including planning, organising and controlling the financial activities of the business and only focussing on financing and investment decisions

**Organisational structure** of a business is the organisational arrangements and systems for gathering together human, physical, financial and information resources at all levels of the system

**Corporate Governance** is set of processes, customs, policies, laws and institutions affecting the way that a business is managed, including relationships among the many stakeholders involved and the goals of the business

## Sources of Finance

- The main divisions of the capital market are the equity market and the bond market
- The main functions of capital markets are trading in existing shares and raising capital
- An initial public offering (IPO) takes place when a company applies to be listed for the firs time
- The capital market is a financial market used mainly for raising long-term finance

## Forms of Finance

- In the case of liquidation, debt is repaid before equity
- Equity holders control the organisation while debt holders normally (except where debt covenants give bondholders control) do not have control over the organisation

## Types of short-term debt instruments that can be obtained on the money market

- Bank overdrafts
- Finance secured by the debtor's book
- Creditor (supplier)

**Benchmarking** = the method whereby management identifies the best risk management practices in their industry or in another industry where similar processes exist, and compare the results and processes of those studied to the organisation's own results and processes

## Methods used by the Risk management Team or the Risk Management Department to monitor the effectiveness of the Risk Management Process

- Loss management
- Scenario management