## Tutorial letter 203／2／2014 <br> Application of financial management techniques

## SEMESTER 2

## Department of Management Accounting

IMPORTANT INFORMATION：<br>This tutorial letter contains important information about your module．

## Dear Student

Enclosed please find the solution in respect of assignment 03／2014．It is in your own interest to work through the suggested solution in conjunction with the assignment and your own answer．

Kind regards

|  | Telephone number | Room number | E－mail |
| :--- | :---: | :---: | :---: |
| Mr N Masela | 0124294415 | $1-37$ |  |
| Mrs S Büchner | 0124292266 | $1-57$ | MAC3702－14－S2＠unisa．ac．za |
| Mrs S Klopper | 0124298526 | $1-40$ |  |

## SOLUTION FOR ASSIGNMENT 03/2014 FOR THE SECOND SEMESTER

## QUESTION 1

Calculate the value of the investment

| Description and (Calculation) | Year 1 | Year 2 |  |
| :--- | :--- | ---: | ---: |
|  | Rand | Rand |  |
| Cash inflow: |  |  |  |
| Year 1: |  | $(2500)$ |  |
| Year 2: |  | 4000 |  |
| Dividend tax | $(4000 \times 0.15)$ |  | $(600)$ |
| Net cash in- / (outflow) | $\mathbf{( 2 5 0 0 )}$ | $\mathbf{3 4 0 0}$ |  |
| Fair rate of return @ 16\% | 0,862 | 0,743 |  |
| Fair value per period | $\mathbf{( 2 ~ 1 5 5 )}$ | $\mathbf{2 5 2 6}$ |  |
| Net present value |  | $\mathbf{3 7 1}$ |  |
|  |  |  |  |

The value of the company has increased by R371 as a result of accepting the investment.
Therefore, Option (3) is correct.

## QUESTION 2

Statement $\mathbf{1}$ is correct
Statement $\mathbf{2}$ is correct
Statement $\mathbf{3}$ is incorrect
The cost of capital for companies with a fluctuating dividend policy is higher than those with a stable dividend policy due to an increased risk taken by the shareholders.

## QUESTION 2 (continued)

Statement $\mathbf{4}$ is correct

Therefore, Option (3) is correct.

## QUESTION 3

Calculate the value of $10 \%$ minority shares:

| Description | Calculation |  |
| :--- | :--- | ---: |
|  |  | Rand |
| Dividends |  |  |
| Year 1 | R100 $000 \times 1,20$ | 120000 |
| Annuity | © | 1971429 |
| Total | $\mathbf{2 0 9 1 4 2 9}$ |  |
| Fair rate of return @ 22\% | 0,820 |  |
| NPV | $\mathbf{1 7 1 4 ~ 9 7 2 ~}$ |  |

Note (1)

Year 2 Dividends $\left(\mathrm{P}_{1}\right)=\quad$ R120 $000 \times 1,15$
$=\quad \mathrm{R} 138000$

Calculate the share price at the beginning of year 2 by using Gordon's dividend growth model:
$P_{1}=D_{2} /(r-g)$
$=R 138000 /(0,22-0,15)$
= R1971429
$100 \%$ shareholding $=\quad$ R1 714972
$10 \%$ shareholding $=\quad$ R1 $714972 \times 10 \%$
$=\quad$ R171497

Therefore, Option (3) is correct.

## QUESTION 4

## Calculate Rand amount received

The foreign receipt of USD 650000 needs to be converted into Rand, therefore the bank will buy the foreign amount and we will use the bank's buying rate. The amount was received via a cheque we will use 0,0977 .

```
Amount received = Foreign currency / exchange rate
    = US$650 000 / 0,0977
    = R6653019
```

Therefore, Option (3) is correct.

## QUESTION 5

## Calculate the forward rate

The number of days between the spot date (31 August 2013) and the forward date (30 November 2013) is 90 days. We need to adjust the annual premium:
$R 12,85+\left(R 12,85 \times 6,10 \% \times \frac{90}{360}\right)=R 13,04$
or
$\mathrm{R} 12,85 \times(1,0001694)^{90}=\mathrm{R} 13,04$ *

Therefore, Option (4) is correct.

* $1+(0,061 / 360)=1.0001694$


## QUESTION 6

## Additional working capital requirements

Working capital requirement for debtors:

- Determine the current ratio of debtors:sales

Current debtors $=$ R550 000
Current sales $=\quad$ R10 000000

Debtors : Sales ratio = R550000/R10000000
$=5,5 \%$

- If there is an increase in sales by R 2000000 then the debtors should increase in line with the same ratio as determined above.

Increase in debtors $=\quad$ R2 $000000 \times 5,5 \%$
$=\quad$ R110 000 increase in debtors

Working capital requirement for inventory:

- Determine the current ratio of inventory: sales

Current inventory $=$ R600 000
Current sales $=$ R10 000000
Inventory: Sales ratio = 600 000/10 000000 $=6 \%$

If there is an increase in sales by R 2000000 then the inventory should increase in line with the same ratio as determined above.

Increase in inventory = R2 $000000 \times 6 \%$
$=\quad \mathrm{R} 120000$
Therefore, the increase in working capital for debtors and inventory :
$R 110000+\mathrm{R} 120000=\mathrm{R} 230000$

Therefore, Option (2) is correct.

## QUESTION 7

## Evaluation of statements

Statement 1 is true

Statement 2 is true

Statement 3 is false
Net working capital is the difference between current assets and current liabilities.

Statement 4 is false
Conservative financing takes place where financing is of a permanent long-term nature.

Therefore, Option (3) is correct.

## QUESTION 8

Calculate the profit to the company

|  |  | Rand |
| :---: | :---: | :---: |
| Gross profit | (R500-R300) $\times 1000$ | 200000 |
| Discount allowed | (R500 $\times 1000 \times 40 \%$ ) $2 \%$ | $(4000)$ |
| Collection cost | R10 1000 | $(10000)$ |
| Carrying cost |  |  |
| - Debtors using the discount | $(R 500 \times 1000 \times 40 \%) \times 15 / 365 \times 17 \%$ | (1 397) |
| - Debtors not using the discount | $(\mathrm{R} 500 \times 1000 \times 60 \%) \times 45 / 365 \times 17 \%$ | (6 288) |
| Net profit |  | 178315 |

Therefore, Option (2) is correct.

## QUESTION 9

Operating profit margin for S\&F (Pty) Ltd for $2 \times 13$ :
EBIT
$=\quad \overline{\text { Turnover from ordinary activities }}$
$=\quad \frac{\mathrm{R} 691600}{\mathrm{R} 10991000}$
$=\quad 6,29 \%$

Therefore, Option (2) is correct.

## QUESTION 10

Total return on other assets:
$=\quad \frac{\text { Finance income }}{\text { Financial assets }}$
$=\quad \frac{\mathrm{R} 20500}{\mathrm{R} 85000}$
$=\quad 24,12 \%$

Therefore, Option (4) is correct.

