

## COLLEGE OF BUSINESS AND ECONOMICS JOHANNESBURG BUSINESS SCHOOL DEPARTMENT OF BUSINESS MANAGEMENT

## LAST ASSESSMENT OPPORTUNITY

| MODULE: | Management Accounting |
| :--- | :--- |
| CODE: | BMA9X02 |
| DATE: | Tuesday 5 June 2018 |
| TIME ALLOWED: | 3 hours |
| TOTAL MARKS: | 100 |


| ASSESSOR: | Prof G Els (UJ) |
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| MODERATOR: | Prof JM Williams (RU) |
| NUMBER OF PAGES: | 10 |

INSTRUCTIONS:

- This is an OPEN-book assessment opportunity.
- Answer ALL the questions.
- Read the questions carefully and answer only what is asked.
- Answer QUESTION 1 in the UJ answer book and QUESTIONS 2 \& 3 in the pre-printed answer book provided.
- Round all answers to 2 d.p. where applicable.
- Question papers must be handed in together with your answer books.
- The general University of Johannesburg policies, procedures and rules pertaining to written assessments apply to this assessment opportunity.


## QUESTION 1

[60 MARKS]
Save-R-Us Ltd is a company that has been in the retail industry for nearly 70 years. The company has grown steadily over the years and has gained a significant market share.

The main focus of Save-R-Us is to provide quality products (groceries and other household products) at affordable prices. Because of the nature of its products, Save-R-Us has relatively low business risk and because of reasonable prices, a loyal customer base. Save-RUs has the following slogan: "Save-R-Us excellent for you!" The financial statements for the year ended 30 September 2017 are as follows:

STATEMENTS OF FINANCIAL POSITION AT 30 SEPTEMBER 2017

| R million | Notes | GROUP |  | COMPANY |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2017 | 2016 | 2017 | 2016 |
| ASSETS |  |  |  |  |  |
| Non-current assets |  | 2006.0 | 1856.2 | 1963.9 | 1813.1 |
| Property, plant and equipment | 9 | 1521.0 | 1425.8 | 1457.7 | 1380.7 |
| Goodwill | 10 | 299.7 | 245.6 | 245.6 | 245.6 |
| Investment in subsidiaries | 34 |  |  | 78.3 | 2.3 |
| Investment in associates | 12 | 17.0 | 3.5 | 16.2 | 3.1 |
| Other investments | 13.3 | 1.5 |  | 1.5 |  |
| Operating lease receivables | 11 | 139.1 | 143.3 | 139.1 | 143.3 |
| Loans | 13 | 23.0 | 13.8 | 23.2 | 13.8 |
| Deferred taxation asset | 14 | 3.2 | 22.0 | 0.8 | 22.1 |
| Other non-current assets |  | 1.5 | 2.2 | 1.5 | 2.2 |
| Current assets |  | 5522.9 | 4683.6 | 5276.9 | 4509.6 |
| Inventories | 15 | 959.2 | 853.1 | 942.1 | 853.0 |
| Trade and other receivables | 16 | 4412.0 | 3715.7 | 4259.1 | 3611.0 |
| Prepayments |  | 28.6 | 26.4 | 27.3 | 25.7 |
| Operating lease receivables | 11 | 25.7 | 15.4 | 25.7 | 15.4 |
| Loans | 13 | 2.2 | 4.5 | 13.0 | 4.5 |
| Taxation receivable | 25 | 10.0 |  | 9.7 |  |
| Bank balances - Guilds | 17 | 85.2 | 68.5 |  |  |
|  |  |  |  |  |  |
| Total assets |  | 7528.9 | 6539.8 | 7240.8 | 6322.7 |
| EQUITY AND LIABILITIES |  |  |  |  |  |
| Capital and reserves |  | 2187.2 | 1940.3 | 2193.0 | 1930.2 |
| Share capital and premium | 18 | 33.4 | 23.3 | 33.4 | 23.3 |
| Treasury shares | 19 | (10.8) |  |  |  |
| Currency translation reserve |  | (0.2) | (0.3) |  |  |
| Share based payment reserve |  | 261.8 | 231.1 | 261.8 | 231.1 |
| Retained earnings |  | 1903.0 | 1686.2 | 1897.8 | 1675.8 |
| Non-current liabilities |  | 209.5 | 209.4 | 208.2 | 209.4 |


| Post-retirement medical aid provision | 21 | 75.1 | 67.9 | 75.1 | 67.9 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Operating lease payables | 11 | 134.4 | 141.5 | 133.1 | 141.5 |
| Current liabilities |  | 5132.2 | 4390.1 | 4839.6 | 4183.1 |
| Trade and other payables | 22 | 4565.0 | 4015.2 | 4246.0 | 3791.4 |
| Operating lease payables | 11 | 29.9 | 15.5 | 29.9 | 15.5 |
| Provisions | 23 | 5.8 | 6.1 | 4.6 | 5.1 |
| Taxation payable | 25 | 0.4 | 2.3 |  | 2.3 |
| Bank overdrafts | 17 | 531.1 | 351.0 | 559.1 | 368.8 |
|  |  |  |  |  |  |
| Total equity and liabilities |  | 7528.9 | 6539.8 | 7240.8 | 6322.7 |

## Additional information for Statement of Financial Position:

- Machinery and equipment was purchased during the year to expand its activities.
- All investments and projects are financed by using a general pool of funds according to company's optimal capital structure.

STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 SEPTEMBER 2017

|  |  | GROUP |  | COMPANY |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| R million | Notes | 2017 | 2016 | 2017 | 2016 |
| Revenue | 1 | 35159.6 | 32256.2 | 34526.7 | 31704.5 |
| Trading profit | 3 | 1316.3 | 1214.5 | 1315.9 | 1209.2 |
| Profit on sale of Western Cape distribution centre |  |  | 63.0 |  | 63.0 |
| BBBEE transactions | 35 | (13.0) | (136.2) | (13.0) | (136.2) |
| Operating profit |  | 1303.3 | 1141.3 | 1302.9 | 1136.0 |
| Interest received | 4 | 24.6 | 34.9 | 24.6 | 34.9 |
| Interest paid | 4 | (20.9) | (29.5) | (20.9) | (29.5) |
| Share of equity accounted associate | 12 | 0.4 |  |  |  |
| Profit before taxation |  | 1307.4 | 1146.7 | 1306.6 | 1141.4 |
| Taxation | 5 | (391.6) | (401.5) | (385.6) | (395.6) |
| Profit for the year attributable to ordinary shareholders |  | 915.8 | 745.2 | 921.0 | 745.8 |
| Other comprehensive income of foreign operations |  | 0.1 | (0.3) |  |  |
| Total comprehensive income |  | 915.9 | 744.9 | 921.0 | 745.8 |
| Earnings per share (cents) | 6 |  |  |  |  |
| Basic |  | 536.0 | 439.4 |  |  |
| Diluted |  | 506.2 | 426.0 |  |  |

## Additional information for Statement of Comprehensive Income:

- Each month for a 2 week period there are nationwide specials (discount on prices of certain products) to attract people to stores.
- Revenue increased during the year because of the expansions (more stores being built).
- A breakdown of revenue and trading profit are given below.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2017

|  | GROUP |  | COMPANY |  |
| :---: | :---: | :---: | :---: | :---: |
| R million | 2017 | 2016 | 2017 | 2016 |
| 1. REVENUE |  |  |  |  |
| Turnover | 34844.2 | 31962.1 | 34197.8 | 31397.5 |
| Other income | 315.4 | 294.1 | 328.9 | 307.0 |
| Marketing revenues | 311.2 | 288.1 | 310.7 | 288.0 |
| Other receipts | 4.2 | 6.0 | 4.2 | 6.0 |
| Dividends received - subsidiaries |  |  | 14.0 | 13.0 |
| Total revenue | 35159.6 | 32256.2 | 34526.7 | 31704.5 |
| 2. COST OF SALES |  |  |  |  |
| Cost of sales represents the net cost of purchases from suppliers, after discounts, rebates and incentive allowances received from suppliers |  |  |  |  |
| 3. TRADING PROFIT |  |  |  |  |
| Trading profit is arrived at after taking into account: |  |  |  |  |
| Turnover | 34844.2 | 31962.1 | 34197.8 | 31397.5 |
| Cost of sales | (32083.7) | (29 393.0) | (31 463.3) | (28847.1) |
| Gross profit | 2760.5 | 2569.1 | 2734.5 | 2550.4 |
| Other income | 315.4 | 294.1 | 328.9 | 307.0 |
| Operating expenses | (1759.6) | (1 648.7) | (1747.5) | (1648.2) |
| Warehousing and distribution expenses | (862.4) | (758.5) | (871.8) | (767.2) |
| Marketing and selling expenses | (434.7) | (425.4) | (426.1) | (416.1) |
| Administration and information technology expenses | (462.5) | (464.8) | (449.6) | (464.9) |
| Trading profit | 1316.3 | 1214.5 | 1315.9 | 1209.2 |

## Additional information for the notes above:.

- The gross profit percentage remained fairly stable during the period because increases in prices paid for products were matched with increases in selling prices of products.

STATEMENTS OF CASH FLOW FOR THE YEAR ENDED 30 SEPTEMBER 2017

|  |  | GROUP |  | COMPANY |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| R million | Notes | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 6}$ |
| Cash flows from operating activities |  | 238.9 | 215.4 | 214.5 | 204.1 |
| Cash generated from operations | 24 | 1199.5 | 1205.1 | 1166.6 | 1187.8 |
| Interest received |  | 23.6 | 34.3 | 23.6 | 34.3 |
| Interest paid |  | $(20.9)$ | $(29.5)$ | $(20.9)$ | $(29.5)$ |
| Taxation paid | 25 | $(384.8)$ | $(526.8)$ | $(376.3)$ | $(520.8)$ |
| Dividends paid | 8 | $(578.5)$ | $(467.7)$ | $(578.5)$ | $(467.7)$ |

- Market Price per share on 30 September 2017 = 9290 cents
- Market Price per share on 30 September 2016 = 6470 cents
- Earnings per share on 30 September $2017=836$ cents
- Earnings per share on 30 September $2016=439.4$ cents
- Dividend per share on 30 September $2017=340$ cents
- Dividend per share on 30 September $2016=277$ cents
- Assume a 365 day year.


## YOU ARE REQUIRED TO:

Analyse and interpret the results for the Save-R-Us GROUP for the year ended 30 September 2017 (give possible reasons for movements in ratios where reasons were not given). You may make use of MS Excel spreadsheets in the calculation of the various ratios.

## FORMULA SHEET:

- Current Ratio: Current Assets/Current liabilities
- Quick Ratio: (Current Assets - Inventory)/Current Liabilities
- Inventory Turnover: Cost of sales/Inventory
- Inventory Days: Inventory/Cost of sales x 365
- Debtors Turnover: Sales/Trade and other Receivables
- Debtors Days: Trade and other Receivables/Sales x 365
- Creditors Turnover: Cost of sales/Trade and other payables
- Creditor Days: Trade and other payables/Cost of sales x 365
- Fixed Asset Turnover: Sales/Non-Current Assets
- Total Asset Turnover: Sales/Total Assets
- Debt Ratio: Total Debt/Total Assets
- Debt/Equity Ratio: Total Debt/Total Equity
- Interest Cover: Earnings before interest and tax/Interest
- Gross Profit\%: Gross Profit/Sales
- Operating Profit\%: Operating Profit/Sales
- Net Profit\%: Net Profit/Sales
- Return on Equity ("Return on Shareholders' funds") : Net Profit/Total Equity
- Return on Assets ("Return on Capital employed"): Earnings before Interest/Total Assets
- Earnings per share: Net Profit/Total number of shares issued
- Dividend per share: Dividend declared/Total number of shares issued
- Earnings Yield: Earnings per share/Market price per share
- Price Earnings: Market price per share/Earnings per share
- Dividend Yield: Dividend per share/Market price per share
- Dividend Cover: Earnings per share/Dividend per share
- Cash Flow to Debt: Cash flow from operating activities/Total Debt


## QUESTION 2

[27 MARKS]
Cool It Ltd is a well-known supplier of reliable and high quality freezers which are mainly used in super markets around the country.

## THE BUDGETED INFORMATION FOR MARCH 2018 WAS AS FOLLOWS:

R
Sales - 1000 freezers are estimated to be sold at a selling price of R5 000 each 5000000

## Cost of 1000 freezers:

| Steel sheets - Each freezer uses one steel sheet that costs R350 each | 350000 |
| :---: | :---: |
| Inner casing - Each freezer uses one casing that costs R410 each | 410000 |
| Sliding doors - Each freezer uses 3 sliding doors that costs a R100 each | 300000 |
| Compressors - Each freezer uses one 1 compressor that costs R500 each | 500000 |
| Thermostat - Each freezer uses 1 thermostat that costs R50 each | 50000 |
| Condensers - Each freezer uses 2 condensers that costs R100 each | 200000 |
| Labour - Each labourer takes two hours to compile a freezer. |  |
| They get paid R100 per hour. | 400000 |
| Manufacturing fixed costs - consists of rent for the building, supervisor salary | 200000 |
| Water and electricity is a manufacturing mixed cost (If 2000 freezers were sold the cost would have amounted to R150 000) | 100000 |
| NET PROFIT | 2490000 |

- During March 2018 a competitor entered into the market selling lower quality freezers at a lower price.
- The current suppliers of the compressors, thermostats and condensers closed down and therefore new suppliers had to be used.
- The current suppliers of the steel sheets and inner casing had a big sale and gave a $30 \%$ discount.
- The current suppliers of the sliding doors did not want to conduct business with Cool It claiming that Cool It takes too long to pay their debt. Cool It purchased the sliding doors from another supplier that offered a cheaper price.
- Labourers demanded a price increase and went on strike for a week. Negotiations with unions took place. Additional labourers were used during the strike that were not familiar with the compiling process.ACTUAL RESULTS FOR MARCH 2018R
Sales of 800 freezers ..... 4000000Costs:
Steel Sheets ..... 196000
Inner casing ..... 229600
Sliding doors ..... 320000
Compressors ..... 480000
Thermostat ..... 80000
Condensers ..... 240000
Labour ..... 960000
Manufacturing fixed costs ..... 200000
Water and electricity ..... 90000
NET PROFIT ..... 1204400


## YOU ARE REQUIRED TO:

2.1 Calculate how many freezers Cool It should sell to break even per the budgeted figures and per the actual figures.
2.2 Flex the budget provided for March 2018 and then evaluate the performance of Cool It for March 2018. Give reasons for your answers and make use of calculations.

## QUESTION 3

[13 MARKS]
Perfect Paints Ltd ("Perfect Paints") manufactures decorative paint at its factory in Wadeville, Johannesburg. One basic product is manufactured, namely ProTouch. ProTouch is available in 15 different colours and is for interior use. Paint is sold in 20 litre containers to hardware stores and paint shops. Perfect Paints also distributes 20 litre containers of paint directly to building contractors and property developers.

The following replacement costs are applicable in the manufacturing of ProTouch:

- Direct material R150 per unit
- Direct labour (They only receive wages according to the hours they work) R250 per unit
- Variable overheads R50 per unit
- Salary workers (It remains fixed per year). These are typically supervisors and security personnel

R500 000 per year

- Fixed overheads

R750 000 per year

- Rent (The factory is rented in terms of a 10 year contract that commenced earlier this year)

R375 000 per year
One 20 litre container ProTouch is sold at R800 per container and annual demand is expected to be 150000 containers.

## Special order:

Perfect Paints has been approached by Penumbra Civils, a major building contractor in the Western Cape, to supply them with 9500 containers ( 20 litres each) of paint of a variation of ProTouch. This order will result in the following income and cost:

- Direct material will remain the same.
- Direct labour for the order will be $10 \%$ more than normal per unit because labourers are expected to use more specialized knowledge to manufacture the variation of ProTouch.
- Variable overheads will remain the same.
- An additional guard will have to be appointed to guard the finished containers of the special order for two months, at a salary of R5 000 per month. This will be the guard's only task.
- Fixed overheads will increase by R50 000 for the year if the special order is accepted due to additional maintenance and wear and tear on the machinery.
- After taking into account all constraints Perfect paints will also lose R45 000 contribution on its normal product line because of the special order, because there is not enough
direct labour available to work enough hours to meet annual demand as well as the units for the special order.
- Transport costs to Penumbra Civils factory will amount to R2 000.
- Penumbra Civils is willing to pay R700 per container.


## YOU ARE REQUIRED TO:

3.1 Calculate whether or not Perfect Paints should accept the special order based on quantitative as well as qualitative analyses.

## END OF ASSESSMENT

