UNIVERSITY OF JOHANNESBURG

**Department of Commercial Accounting**

# Advanced Marketing Finance 4B

**BGF44B4**

## Last Assessment Opportunity
## November 2015

**Time: 3 hours** **Marks: 100**

**Assessors**: Mr HS van der Watt

**Internal moderator**: Me L Joubert

**External moderator:** Mr HJ Dixon (Tshwane University of Technology)

**INSTRUCTIONS:**

- This paper consists of 10 pages (including the cover page).
- Answer all questions. Show all calculations and workings clearly.
- Start each question on a new page.
- Silent, non-programmable calculators may be used.
- Round all calculations to four decimal places, unless stipulated otherwise.

**This question paper must be submitted inside your script.**

| Question | Topic | Marks | Time |
|---|---|---|---|
| 1 | Standard costing | 16 | 29 minutes |
| 2 | Capital budgeting | 35 | 63 minutes |
| 3 | Analysis of financial statements | 30 | 54 minutes |
| 4 | Financial planning | 19 | 34 minutes |
| | | **100** | **180 minutes** |

| **QUESTION 1** | (16 marks) |
|---|---|

JJ Limited manufactures coffee tables. JJ Limited uses a standard costing system in determining the cost of inventory. The information below applies to the activities of the reporting period ended 31 August 2014.

The following information is relevant for one coffee table:

| **Cost item** | **Standard price** | **Standard quantity** | **Standard cost per unit** |
|---|---|---|---|
| Direct material (per $m^2$) | R180.00 | ¾ $m^2$ | R135.00 |
| Direct labour (per hour) | R30.00 | 1 ½ hours | R45.00 |
| Variable manufacturing overheads (per hour) | R15.00 | 1 ½ hours | R22.50 |
| Fixed manufacturing overheads (per hour) | R17.00 | 1 ½ hours | R25.50 |
| **Total standard cost per unit** | | | **R228.00** |

**Additional information**

- Fixed and variable manufacturing overhead allocation is based on direct labour hours.
- The standard selling price is R325.00 per coffee table.
- The standard cost is based on normal production of 12 000 coffee tables per annum.
- The actual price of material was R179.50 per $m^2$
- Assume no change in the opening or closing inventory of material and coffee tables for the reporting period.
- JJ Limited produced and sold 11 036 coffee tables during the reporting period.
- There was a decrease in demand for the coffee tables and JJ Limited reduced the selling price for the reporting period by 5% below the standard selling price.
- JJ Limited worked 19 313 direct labour hours during the reporting period.
- During the reporting period JJ Limited purchased and used 8 829 meters material for the manufacturing of the coffee tables.
- During the reporting period total actual variable manufacturing overheads amounted to R250 250 whilst total actual fixed manufacturing overheads amounted to R277 369.
- After negotiation with the unions, a direct labour rate for the reporting period of R32.00 per hour was agreed upon.

**Required:**

Calculate the following variances (indicate the formula and the interpretation of the variance in each case):

| | | |
|---|---|---|
| a) | Material price variance | **(1½)** |
| b) | Material quantity variance | **(2½)** |
| c) | Total material cost variance | **(1½)** |
| d) | Direct labour rate variance | **(1½)** |
| e) | Direct labour efficiency variance | **(2½)** |
| f) | Variable overhead expenditure variance | **(2½)** |
| g) | Variable overhead efficiency variance | **(1½)** |
| h) | Fixed overhead expenditure variance | **(2½)** |

| **QUESTION 2** | (35 marks) |
|---|---|

Jay Limited is a manufacturing company that produces various products for the automotive industry. Jay Limited is in the process of acquiring new manufacturing equipment. The following estimated information is available:

| | |
|---|---|
| Economic life | 4 years |
| Purchase cost of equipment | R14 000 000 |
| Annual profit: | |
| Year 1 | R1 700 000 |
| Year 2 | R1 800 000 |
| Year 3 | R1 900 000 |
| Year 4 | R2 290 000 |
| Residual value at the end of 4 years | 10% of purchase cost |

**Additional information:**

- Assume that the equipment will be sold for R660 000 at the end of the 4 years. The profit/loss of the proposed sale has not yet been included in the profit of Year 4.
- Depreciation of 25% per annum, using the straight line method, is included in the estimated profit calculation.
- The cost of capital is 12%.
- The target Accounting Rate of Return (ARR) is 40% and the target Payback Period is 3 years.
- Ignore tax and inflation.

**Required:**

***All formulas are attached at the end of the question paper.***
***Show all calculations!***

a) Calculate the Accounting Rate of Return. **(6)**

b) Calculate the Payback Period. **(11)**

Use the format below to show your calculations:

| Year | Cash flow in year | Outstanding balance end of year |
|---|---|---|

c) Calculate the net present value of the equipment. **(12)**

Use the format below to show your calculations:

| Description | Total | Y0 | Y1 | Y2 | Y3 | Y4 |
|---|---|---|---|---|---|---|

d) Comment on the suitability of the methods used in a) – c) in terms of the evaluation of capital projects. Should the equipment be purchased? Provide reasons for your answer? **(6)**

**QUESTION 3** (30 marks)

The following are extracts from the financial statements of Purple (Pty) Ltd for the reporting periods ended June 2015 and June 2014.

| **STATEMENT OF PROFIT AND LOSS AND OTHER COMPREHENSIVE INCOME** | **2015 R** | **2014 R** |
|---|---|---|
| Sales | 1 105 000 | 662 000 |
| Cost of sales | (160 000) | (78 000) |
| Gross profit | 945 000 | 584 000 |
| Finance cost | (87 000) | (71 500) |
| Other expenses | (56 000) | (53 000) |
| Profit before tax | 802 000 | 459 500 |
| Tax expense | (89 000) | (79 000) |
| | | |
| **Total comprehensive income for the year** | **713 000** | **380 500** |
| | | |
| **STATEMENT OF FINANCIAL POSITION** | **2015 R** | **2014 R** |
| **ASSETS** | | |
| **Non-current Assets** | | |
| Property, Plant and Equipment | 2 198 000 | 1 445 250 |
| | | |
| **Current Assets** | | |
| Inventory | 225 000 | 83 750 |
| Trade Receivables | 440 250 | 343 000 |
| Cash and cash equivalents | 39 200 | 33 400 |
| | | |
| **TOTAL ASSETS** | **2 902 450** | **1 905 400** |
| | | |
| **EQUITY AND LIABILITIES** | | |
| **Equity** | | |
| Share Capital | 500 000 | 500 000 |
| Retained Earnings | 1 913 000 | 1 200 000 |
| | | |
| **Non-current Liabilities** | | |
| Long-term loans | 250 000 | 155 000 |
| | | |
| **Current Liabilities** | | |
| Trade Payables | 239 450 | 50 400 |
| | | |
| **TOTAL EQUITY AND LIABILITIES** | **2 902 450** | **1 905 400** |

**Required:**

a) Calculate the following ratios for the reporting periods ending 30 June 2014 and 30 June 2015 (the formulas are attached at the end of the question paper):

1. Gearing ratio **(6)**
2. Operating profit margin **(5)**
3. Gross profit margin **(4)**
4. Current ratio **(6)**

b) What do the profitability ratios calculate? **(2)**

c) Provide a possible reason for the decrease in gross profit margin from 2014 to 2015. **(2)**

d) What is the minimum current ratio cover? **(2)**

e) Provide 3 limitations of ratio analysis. **(3)**

| **QUESTION 4** | (19 marks) |
|---|---|

a) Name four disadvantages of listing on a stock exchange. **(4)**

b) Would you expect the market price of ordinary shares or of preference shares to be more volatile? Why? **(3)**

c) A company decides to make a rights issue at below the current market price. Assume that existing shareholders take up all the rights. Does it matter that the rights issue is made below the market price? **(3)**

d) Venture capitalists provide long-term capital in the form of share and loan finance for different situations. Name and discuss 5 situations where venture capitalist will provide finance to a business. **(9)**

**TOTAL PAPER MARK [100]**