



**EXAMINATION : FINANCIAL MANAGEMENT 202 (FM202)**

**DATE : MAY 2011 PILOT EXAMINATION**

**TIME ALLOWED : 3 HOURS**

**TOTAL MARKS : 100**

#### **INSTRUCTIONS TO CANDIDATES**

1. Please refer to the examination rules and regulations as found in the examination answer book.
2. Answer **ALL** the questions.
3. The use of calculators is permitted. Show **ALL** calculations.
4. Read all questions carefully to determine exactly what is required before attempting to answer.
5. Set your answers out under appropriate headings and sub-headings.
6. Number your answers clearly.
7. **IMPORTANT:** Indicate the questions attempted by drawing a circle around the question number provided on the front cover of the answer book.

#### **NOTE:**

- Examination books are the property of the IMM GSM and may not be removed from the examination hall.
- Answers to examination questions should not include appendices in the form of personal notes to the examining panel.

|                                 |
|---------------------------------|
| <b>Answer ALL the questions</b> |
|---------------------------------|

**QUESTION 1****[30]**

Spice Manufacturers Ltd produces flavouring for a number of famous brand chips manufacturers. They manufacture two flavours, namely “Cheese”, and “BBQ”. They have obtained sales forecasts from their clients and prepared a projected income statement for the first 6 months of 2011 as follows:

| <b>Spice Manufacturers Ltd projected Income Statement</b> |                  |               |
|-----------------------------------------------------------|------------------|---------------|
| <b>for the period ended</b>                               | <b>June 2011</b> | <b>%</b>      |
| Revenue                                                   | 3 297 000        | 100.0%        |
| Less: Cost of Sales                                       | 1 983 000        | 60.15%        |
| Material                                                  | 845 000          | 25.63%        |
| Labour                                                    | 467 000          | 14.16%        |
| Overhead                                                  | 569 000          | 17.26%        |
| Depreciation                                              | 102 000          | 3.09%         |
| <b>Gross Profit</b>                                       | <b>1 314 000</b> | <b>39.85%</b> |
| Less: Operating expenses                                  | 471 000          | 14.29%        |
| Selling expenses                                          | 296 000          | 8.98%         |
| General & administrative expenses                         | 175 000          | 5.31%         |
| <b>Operating profit for the year</b>                      | <b>843 000</b>   | <b>25.57%</b> |
| Finance cost and interest expense                         | 220 000          | 6.67%         |
| <b>Earnings before tax</b>                                | <b>623 000</b>   | <b>18.90%</b> |
| Taxation                                                  | 174 000          | 5.28%         |
| <b>Increase in accumulated profits</b>                    | <b>449 000</b>   | <b>13.62%</b> |

You are required to use the information provided in the projected income statement above (refer to the percentages that are all expressed as a percentage of sales) to develop a projected income statement for the following 6 months (July to December) given the assumptions below and to comment on the movement of profit after tax.

1. Projected sales for the 6 months to December are projected at R4m.
2. Labour cost will drop to 14.00% as a result of greater efficiency in the plant.
3. The costs of materials are expected to rise to 27% as a result of a weakening rand against the US dollar.
4. Overhead costs will rise by 5%.
5. Depreciation will reduce by R12,000 as old equipment are scrapped.
6. Selling expenses will rise in proportion plus an additional R80,000 required for a marketing campaign.
7. There will be no change in interest charges.
8. Income tax is set at 28% of earnings before tax.
9. Cost factors not specifically mentioned will rise in line with past trends.

**QUESTION 2 [15]**

Working capital policies involve two basic questions. Identify the two basic questions and explain the difference between the three basic approaches that can be followed to finance working capital. Ensure that you refer to risk in your answer.

**QUESTION 3 [15]**

- 3.1 Bravo Builders orders R25,000 worth of goods from Castle Manufacturers, whose credit terms are 2.25/10 net 30. (7)
- What is the cost to Bravo Builders if they decide to forfeit the cash discount? Assume 360 days per annum.
  - Assume that they can earn interest at 8.5% per annum, what would your advice be to Bravo Builders.
- 3.2 Bravo Builders wishes to borrow R150,000. SkyBank offers a rate of 9% for one year. Interest is payable in advance. EarthBank offers a rate of 10% with interest payable at maturity. What is the effective rate of interest to Bravo Builders under each option? At which Bank should Bravo Builders place the loan? (8)

**QUESTION 4 [15]**

Jonty's Sports is a retailer selling merchandise on credit. The management team has established that it takes an average of 75 days from stocking a product to selling it. Payments to suppliers are made on average after 58 days. On average accounts receivable are collected after 45 days. The firm spends R630,000 annually on operating cycle investment. The firm has negotiated to pay 8% finance charges on short term loans and overdrafts.

You are required to:

- Calculate the operating cycle for the firm
- Calculate the cash conversion cycle for the firm and indicate if it is a positive or a negative cycle.
- Calculate the amount for which funding is required.
- Calculate finance costs and explain the significance of this cost.

**QUESTION 5 [25]**

- 5.1 An investor had shares worth R500 at the beginning of 2009. At the end of 2009 he received a dividend of R40 and the share price increased to R530. At the end of 2010 (the second period) he received a dividend of R45 and the share price increased to R550. (7)

You are required to determine the average return over the two periods using the arithmetic mean method.

5.2 Apex Manufacturers is considering investing in new equipment. The following information is available:

1. Equipment will cost R170,000 and installation will amount to R10,000.
2. The firm uses straight-line depreciation and the asset may be depreciated over 5 years. Installation costs can be capitalised.
3. The old equipment has R0 book value and can be sold to scrap metal dealers for R3,000.
4. The firm is subject to a 28% tax rate.

There will be an increase in NOPAT of R15,000 per annum over the next five years.

You are required to calculate the following:

- a) Initial investment **(3)**
- b) Incremental net operating cash inflows. **(3)**

5.3 The cost of capital for Apex Manufacturers is 9%. They have completed their investigation into alternative equipment investments and have shortlisted two potential suppliers. Machine A has an initial investment of R350,000 and will yield net incremental operating cash flows of R105,000 per annum over five years. Machine B has an initial investment requirement of R270,000 and will yield net incremental operating cash flows of R58,000 per annum over five years. The PVIF are provided below.

|        | 15% PVIF |
|--------|----------|
| Year 1 | 0.8696   |
| Year 2 | 0.7561   |
| Year 3 | 0.6575   |
| Year 4 | 0.5718   |
| Year 5 | 0.4972   |

You are required to:

- a) Calculate the NPV for both investments. **(8)**
- b) Advise the firm about the outcome of the NPV calculation so that they can make a decision about the best investment between the two machines. **(4)**

**EXAM TOTAL: 100**