# ACCA

# Paper F9

# Financial Management

# Mock Examination 2

| **Question Paper** | |
|---|---|
| **Time allowed** | |
| Reading and Planning<br>Writing | **15 minutes**<br>**3 hours** |
| **ALL FOUR questions are compulsory and MUST be attempted** | |
| **During reading and planning time only the question paper may be annotated** | |

**DO NOT OPEN THIS PAPER UNTIL YOU ARE READY TO START UNDER EXAMINATION CONDITIONS**

# Question 1

Cavic Co services custom cars and provides its clients with a courtesy car while servicing is taking place. It has a fleet of 10 courtesy cars which it plans to replace in the near future. Each new courtesy car will cost $15,000. The trade-in value of each new car declines over time as follows:

| | | | |
|---|---|---|---|
| Age of courtesy car (years) | 1 | 2 | 3 |
| Trade-in value ($/car) | 11,250 | 9,000 | 6,200 |

Servicing and parts will cost $1,000 per courtesy car in the first year and this cost is expected to increase by 40% per year as each vehicle grows older. Cleaning the interior and exterior of each courtesy car to keep it up to the standard required by Cavic's clients will cost $500 per car in the first year and this cost is expected to increase by 25% per year.

Cavic Co has a cost of capital of 10%. Ignore taxation and inflation.

*Required*

(a) Using the equivalent annual cost method, calculate whether Cavic Co should replace its fleet after one year, two years, or three years. **(12 marks)**

(b) Discuss the causes of capital rationing for investment purposes. **(4 marks)**

(c) Explain how an organisation can determine the best way to invest available capital under capital rationing. Your answer should refer to single-period capital rationing, project divisibility and the investment of surplus funds. **(9 marks)**

**(Total = 25 marks)**

# Question 2

Extracts from the recent financial statements of Anjo Co are as follows:

INCOME STATEMENT

| | 20X6 | 20X5 |
|---|---|---|
| | $000 | $000 |
| Revenue | 15,600 | 11,100 |
| Cost of sales | 9,300 | 6,600 |
| Gross profit | 6,300 | 4,500 |
| Administration expenses | 1,000 | 750 |
| Profit before interest and tax | 5,300 | 3,750 |
| Interest | 100 | 15 |
| Profit before tax | 5,200 | 3,735 |

STATEMENT OF FINANCIAL POSITION EXTRACTS

| | 20X6 | | 20X5 | |
|---|---|---|---|---|
| | $'000 | $'000 | $'000 | $'000 |
| Non-current assets | | 5,750 | | 5,400 |
| Current assets | | | | |
| Inventories | 3,000 | | 1,300 | |
| Receivables | 3,800 | | 1,850 | |
| Cash | 120 | | 900 | |
| | | 6,920 | | 4,050 |
| Current liabilities | | | | |
| Trade payables | 2,870 | | 1,600 | |
| Overdraft | 1,000 | | 150 | |
| | | (3,870) | | (1,750) |
| Total assets less current liabilities | | 8,800 | | 7,700 |

All sales were on credit. Anjo Co has no long-term debt. Credit purchases in each year were 95% of cost of sales. Anjo Co pays interest on its overdraft at an annual rate of 8%. Current sector averages are as follows:

Inventory days: 90 days    Receivable days: 60 days    Payable days: 80 days

*Required*

(a) Calculate the following ratios for each year and comment on your findings.

(i) Inventory days
(ii) Receivable days
(iii) Payable days **(6 marks)**

(b) Calculate the length of the cash operating cycle (working capital cycle) for each year and explain its significance. **(4 marks)**

(c) Discuss the relationship between working capital management and business solvency, and explain the factors that influence the optimum cash level for a business. **(7 marks)**

(d) A factor has offered to take over sales ledger administration and debt collection for an annual fee of 0·5% of credit sales. A condition of the offer is that the factor will advance Anjo Co 80% of the face value of its receivables at an interest rate 1% above the current overdraft rate. The factor claims that it would reduce outstanding receivables by 30% and reduce administration expenses by 2% per year if its offer were accepted.

*Required*

Evaluate whether the factor's offer is financially acceptable, basing your answer on the financial information relating to 20X6. **(8 marks)**

**(Total = 25 marks)**

# Question 3

JER Co wishes to raise finance for a major investment project by means of a rights issue, and is proposing to issue shares on the basis of 1 for 5 at a price of $1.30 each. The following information relates to JER Co.

Current earnings: $1.5 million
Dividend paid (cents per share)
20X5:8
20X6:9
20X7:11
20X8:11
20X9:12

JER Co has 5 million ordinary shares in issue, with a market price of $1.60 each. JER Co has $1 million of irredeemable 12% debentures in issue, with a market price of $80 per $100 nominal value. It also has 500,000 15% preference shares in issue, with a nominal value per share of $1, and a market value of $1.45. The tax rate is 33%.

James Brown currently owns 10,000 shares in JER Co and is seeking advice on whether to not to take up the proposed rights.

*Required*

(a) Explain the difference between a rights issue and a scrip issue. Your answer should include comment on the reasons why companies make such issues and the effect of the issues on private investors. **(7 marks)**

(b) Calculate:

   (i) The theoretical value of James Brown's shareholding if he takes up his rights
   (ii) The theoretical value of James Brown's rights if he chooses to sell them **(4 marks)**

(c) Using only the information given above, and applying the dividend growth model formula, calculate the weighted average cost of capital of JER Co. **(8 marks)**

(d) Explain how a belief that the stock market operates with a strong level of efficiency might affect the behaviour of the finance directors of publicly quoted companies. **(6 marks)**

**(Total = 25 marks)**

# Question 4

JetAWay is a 'low cost' airline providing airline services between 25 cities in the European Union. It now operates 40 aircraft and employs 7,500 people across the EU. The main areas of employment are in Aberdeen, where the company's headquarters and main aircraft service centre are located, Milan, which maintains the company's database services and most recently Selab, a new member of the EU. JetAWay recently opened a repair centre in Selab with the promise of connecting the main airport to 10 other European destinations.

**Operations**

JetAWay operates 275 different services every day ranging from 'commuter style' services, being cities with less than one hour flying time, to provision of holiday services. The 25 cities it serves are in 15 different countries with only 4 of these countries being in the Eurozone. JetAWay has to maintain staff in each country with salaries being paid in the local currency.

Customers make bookings using the Internet or JetAWay's call centre. All bookings are made in euros or the relevant local currency. However, tickets can be purchased from any of JetAWay's 15 national websites, and then funds are transferred via the Milan data centre to other locations as necessary. Currencies in some European countries which are not aligned to the euro still fluctuate significantly.

JetAWay has ordered 10 second-hand aircraft from an American airline which recently went into chapter 11 bankruptcy. The aircraft are only 3 years old and can seat 126 passengers each.

The aircraft will be available in three months' time at a cost of $40 million. JetAWay does not have any surplus funds. The following additional information is available:

| | **US $** | | **UK £** | |
|---|---|---|---|---|
| | *Deposit rate* | *Borrowing rate* | *Deposit rate* | *Borrowing rate* |
| | % | % | % | % |
| 1 month | 6.75 | 7.75 | 8.25 | 10.50 |
| 3 months | 7.00 | 8.25 | 8.50 | 10.75 |

| | $/£ exchange rate ($=£1) |
|---|---|
| Spot | 1.6625 – 1.6635 |
| 1 month forward | 1.6565 – 1.6577 |
| 3 months forward | 1.6445 – 1.6460 |

*Required*

(a) Explain the major types of foreign exchange risk (or currency risk) that JetAWay could be subject to regarding its European operations, noting the extent to which the company is affected by each risk. **(8 marks)**

(b) JetAWay would like to hedge against exchange rate movements in the next three months. Calculate whether forward exchange contracts or the money markets should be used to hedge this risk. **(6 marks)**

(c) Explain the four-way equivalence model. **(4 marks)**

(d) Discuss the characteristics and benefits of interest rate swaps compared with other forms of interest rate management, including forward rate agreements and interest rate futures. **(7 marks)**

**(Total = 25 marks)**