Certified Accounting Technician Examination Advanced Level

# Managing Finances

Wednesday 16 June 2010

# Time allowed

Reading and planning:15 minutesWriting:3 hours

This paper is divided into two sections:

- Section A ALL 10 questions are compulsory and MUST be attempted
- Section B ALL FOUR questions are compulsory and MUST be attempted

Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.

This question paper must not be removed from the examination hall.

The Association of Chartered Certified Accountants

# Section A – ALL TEN questions are compulsory and MUST be attempted

# Please use the space provided on the inside cover of the Candidate Answer Booklet to indicate your chosen answer to each multiple choice question.

Each question in this section is worth 2 marks.

- 1 If a company regularly fails to pay its suppliers by their normal due dates, it may lead to the following:
  - (i) Reduction in credit rating
  - (ii) Trade receivables days may increase
  - (iii) Difficulty in obtaining credit from new suppliers
  - (iv) Having insufficient cash to settle trade payables

#### Which TWO of the above could arise as a result of exceeding suppliers' credit terms?

- **A** (iii) & (iv)
- **B** (ii) & (iii)
- **C** (i) & (iv)
- **D** (i) & (iii)
- **2** Quilt Co grants credit terms of 30 days net to customers but offers an early settlement discount of 1% for payment within seven days.

#### What is the compound percentage cost of the discount to Quilt Co, to the nearest per cent?

- **A** 17%
- **B** 18%
- **C** 19%
- **D** 20%
- **3** The following information relates to the inventory of Swiss Co:

	Maximum	Minimum
Usage levels	1,000 kg per day	300 kg per day
Lead times	10 days	5 days

Inventory can only be purchased in batches of 1,000 kg.

# What is the maximum amount of inventory that should be held?

- **A** 10,000
- **B** 9,500
- **C** 1,500
- **D** 8,500
- **4** 'An unconditional order in writing to pay the addressee a specified sum of money either on demand or at a future date.'

# What does the above definition describe?

- **A** Certificate of deposit
- **B** Loan stock
- **C** Bill of exchange
- D Convertible bond

**5** Mint Co is considering using the services of a factor. Its annual sales are \$5,000,000 with customers taking an average of 60 days to pay. The cost of financing these is currently \$65,753 per annum.

The factor will advance 70% of Mint Co's sales invoices at a promotional rate of 8% of amounts advanced, the same rate that the company pays on its overdraft. In addition, the factor will reduce the average receivables period to 30 days. It will also take over the administration of the sales ledger, for which it will charge an annual fee of 1% of sales.

# What is the cost or benefit of employing the services of the factor compared to continuing without the factor?

- **A** \$17,124 cost
- **B** \$17,124 benefit
- **C** \$15,753 benefit
- **D** \$15,753 cost

# 6 Which of the following statements are true?

Statement 1: A Central Bank deals in government debt. Statement 2: A Central Bank acts as lender of the last resort.

- A Only statement 1
- **B** Only statement 2
- **C** Both statements 1 & 2
- **D** Neither statement 1 nor statement 2

# 7 Which of the following relate to a finance lease?

- **A** The lessor always supplies the equipment directly to the lessee
- **B** The lessor is responsible for servicing and maintaining the leased equipment
- **C** The period of the lease is usually shorter than the asset's expected useful economic life
- **D** The lease has a primary period which is often followed by an indefinite secondary period

# 8 Which of the following statements are true?

Statement 1: Being listed on a recognised stock exchange is a disadvantage for a company that wants to facilitate its growth by acquisition.

Statement 2: Being listed on a recognised stock exchange can enhance a company's image.

- A Only statement 1
- **B** Only statement 2
- **C** Both statements 1 & 2
- **D** Neither statement 1 nor statement 2
- **9** Exactly one year ago, \$100 of treasury stock was issued with a coupon rate of 4%, redeemable at par two years after issue. The stock currently has a market value of \$102.25.

# What is the stock's interest yield, calculated to the nearest 2 decimal places?

- **A** 3.91%
- **B** 4.00%
- **C** 1.71%
- **D** 2.20%

**10** A company has determined that the net present value of an investment project is positive \$24,800 when using a 5% discount rate and negative \$12,400 when using a 10% discount rate.

# What is the internal rate of return of the project, to the nearest 1%?

- **A** 6%
- **B** 7%
- **C** 8%
- **D** 9%

(20 marks)

This is a blank page. Section B begins on page 6.

### Section B – ALL FOUR questions are compulsory and MUST be attempted

**1** Tastee Co is a small private company, which provides residential cookery courses to individuals. The company is currently collating information for its budget for the six months ending 31 December 2010. The following information is available:

#### (i) Provisional bookings for courses

	Jul	Aug	Sep	Oct	Nov	Dec
Number of courses	0	2	4	3	4	4
Average number of attendees per course	0	16	8	16	8	12

No courses are run during the month of July. Tastee Co requires customers to confirm their attendance in the week prior to the course, giving their credit card number as a guarantee. On average, 75% of provisional bookings are confirmed and therefore result in fee payment.

#### (ii) Course prices

Each course lasts for three days, running from Friday to Sunday, and the fee for each course is \$1,200 per attendee. All courses have to be paid for in full on the first day of the course. Any returning customers are given a 25% discount on the fee. One in three of confirmed bookings is from a returning customer.

#### (iii) Personnel costs

Tastee Co's courses are delivered by experienced chef, Oliver James. He is not a member of staff at Tastee Co, but rather an outside contractor. Oliver James charges Tastee Co \$3,000 for each course and is supported by his assistant, Mark White. Oliver James pays his assistant a wage of \$500 per course.

Tastee Co has several part-time support staff. Wages costs for July are only \$1,000 per month, but every month thereafter they amount to \$4,000. However, the company is planning to increase pay by 5%, from September. All staff are paid at the end of each month for that month's work.

#### (iv) Property costs

The business property comprises a small hotel, which includes an office and large kitchen. Tastee Co rents the hotel at a rental cost of \$24,000 per annum, with rents being paid quarterly in advance on 31 March, 30 June, 30 September and 31 December. However, the company has just received a notice from the landlord of the hotel, informing them that, with effect from 31 December 2010, annual rental payments will increase by 5%.

#### (v) Food costs

All food purchased by the hotel is organic and delivered weekly by Farm Fresh, a local firm. On the 5th day of each month, Tastee Co pays the bill for the previous month's food deliveries. However, in December, Tastee Co is also required to settle its bill for December's food requirements due to the two-week holiday taken by Farm Fresh in January. Over recent months, the cost for food on each residential course (including ingredients used for cooking) has been \$50 per attendee. However, due to lower availability of organic produce, inflation of 2% per month is expected to occur from September onwards. Food costs for June 2010 are expected to be \$1,100 in total.

#### (vi) General Overheads

Tastee Co's business rates are \$8,350 per annum, paid in ten equal instalments from April to January each year. The company's fuel cost of \$4,200 per annum is paid for by equal monthly direct debits. However, it has just come to the fuel supplier's attention that the direct debit failed to leave Tastee Co's bank accounts in the months of January to April inclusive, due to a bank error. Therefore, the direct debit payment for July will include the amounts owed for these months too.

#### (vii) Capital expenditure

Tastee Co needs to replace its three ovens in August. The list price of these is \$1,800 each but Tastee Co's Managing Director is confident that he can obtain a 10% discount on this price. The supplier is also allowing Tastee Co to pay for the ovens in two instalments – one in August and one in October.

#### (viii) Bank account

The balance on the company's bank account is expected to be zero on 30 June 2010; it currently has a sufficient overdraft facility to cover any cash deficit arising.

#### **Required:**

(a) Prepare a cash budget for each of the six months in the period ending 31 December 2010.

Note: All workings should be rounded to the nearest \$.

(b) Briefly explain three motives for holding cash, as identified by Keynes. (3 marks)

#### (20 marks)

(17 marks)

2 Bulb Co is a company specialising in the manufacture of a large range of light bulbs. Over recent years, the company has struggled to survive, having made a loss for the last two accounting periods ended 30 November 2008 and 30 November 2009. Despite this, the company currently has no debt finance at all, and it wholly owns all of its land and buildings, which are of substantial value. Over the last six months, business has begun to improve steadily, with an increase in sales of 20% compared to the same six month period last year. This improvement, however, has given rise to a need for increased working capital. The company has very little cash at present, having used most of its resources to keep afloat during its loss-making period. The company therefore needs to accurately ascertain its working capital requirements for the next year. The following forecast figures are available.

Turnover for the year	\$65,000,000
Costs as a percentage of sales:	
Direct materials	20%
Direct labour	25%
Variable overheads	15%
Fixed overheads	18%
Selling and distribution costs	5%

The following average time periods are expected:

#### (i) Inventories

Raw materials are held in inventory for eight weeks and finished goods are held for six weeks. All finished goods inventories and work-in-progress inventories include direct materials, direct labour and variable overhead costs. Assume that goods remain in work-in-progress for two weeks and are 75% complete as regards direct materials and 50% complete as regards direct labour and variable overheads.

#### (ii) Accounts receivable

All customers are credit customers and take an average of nine weeks to pay.

#### (iii) Accounts payable

The lengths of credit taken vary depending on the category of expense. They are as follows:

Direct materials	6 weeks
Direct labour	1 week
Variable overheads	8 weeks
Fixed overheads	5 weeks
Selling and distribution costs	4 weeks

# **Required:**

- (a) Calculate the working capital requirement of Bulb Co for the next year. Assume that there are 52 working weeks in the year. (12 marks)
- (b) Bulb Co has decided that it should apply to the bank for an overdraft or a short-term loan to cover the increase in its working capital requirements over the next year. Having run its business with very little debt for many years now, it is unsure what factors the bank will take into account when deciding whether to lend to the company.

# Describe FOUR factors that the bank will consider when deciding whether to grant this loan or overdraft to Bulb Co. (8 marks)

# (20 marks)

**3** King Edward's Hospital is a private hospital providing a range of care to patients. It is currently appraising a major capital investment project. The hospital directors are considering opening up a specialist fertility department in a wing of the hospital that is currently unused. If the decision is made to proceed with the investment, the equipment would be bought and the staff would be recruited immediately. Treatment and testing of patients could then start straight away.

In assessing the viability of capital projects, the hospital currently uses a target accounting rate of return of 20% (based on the average investment over the period) and a target payback period of four years. It will undertake a project only if BOTH the accounting rate of return and the payback period meet or exceed the targets. The following data are available for this proposed investment.

	\$'000
Cost of specialist equipment	8,000
Annual increased revenues	5,000
Annual increased staff costs	(1,500)
Annual increased other costs*	(1,000)

\* No depreciation is included in these figures.

After five years, it is thought that most of the equipment would have become outdated and would have a residual value of only \$0.5 million.

The company's cost of capital is 10% per annum.

#### Required

(a)	Briefly define both of the hospital's current methods of project appraisal.	(2 marks)
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- (b) Calculate the accounting rate of return and the payback period for the project and recommend on a purely financial basis whether the project should proceed. (8 marks)
- (c) Briefly outline TWO disadvantages of each of these two methods.
- (d) You have mentioned to the directors that the net present value method is another valuable method of investment appraisal and that it may give a more accurate representation of whether the project should proceed. The directors have never heard of this method.
  - (i) Briefly explain the net present value method;
  - (ii) Using the extracts from the discount and annuity tables provided, recommend whether the project should proceed using this basis of investment appraisal. Show all workings clearly. (4 marks)

Extracts from discount factor tables at a discount rate of 10%		Extracts from present value of annuity tables at a discount rate of 10%		
Time	Factor	Time	Factor	
1	0.909	1	0.909	
2	0.826	2	1.736	
3	0.751	3	2.487	
4	0.683	4	3.170	
5	0.621	5	3.791	
6	0.564	6	4.355	
7	0.513	7	4.868	
8	0.467	8	5.335	
9	0.424	9	5.759	
10	0.386	10	6.145	

(20 marks)

(4 marks)

(2 marks)

4 Click Co is a photographic printing company. It prints photographs for customers, mainly the general public, generating sales revenue of \$1,800,000 per annum. All of the company's printing machines are hired rather than owned outright. The current rate of rejects (i.e. prints of unacceptable quality) is 10%.

Click Co is now considering replacing the machines with more technically advanced ones, which would eliminate rejects altogether. The company's standard costs for one photograph are as follows:

	\$	\$
Direct materials		
– Paper:	0.04	
– Ink:	0.03	
Direct labour		0·07 0·01
Variable overheads		0.02
Cost per unit produced Cost of rejects		0·10 0·01
Variable cost per unit sold (good units)		0.11

Currently, the company sells 12,000,000 photos per annum. The company's fixed overheads are \$35,000 per month. If the new machines were hired to replace the old machines, machine rental costs would increase by \$5,000 per month. However, the new machines would reduce variable overheads by 30%. The ink used by the new machines is 10% cheaper than the ink being currently used.

# **Required:**

(a)	Calculate the current annual break-even point in good units.	(3 marks)
(b)	Calculate the annual break-even sales revenue if the new machines are hired.	(5 marks)

(c) Calculate the annual level of good quality photos that would have to be demanded and sold for Click Co to become indifferent about using the old or the new machines. Briefly explain the basis of your calculation.

(6 marks)

(d) Briefly outline THREE advantages and THREE disadvantages of using marginal costing, as compared to absorption costing. (6 marks)

(20 marks)

**End of Question Paper**