

# THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

*A Committee of the Council of ICPAU*

## CPA (U) EXAMINATIONS

### LEVEL THREE

#### FINANCE – PAPER 14

**TUESDAY, 19 JUNE 2007**

#### INSTRUCTIONS TO CANDIDATES

1. Time allowed is **3 hours**.
2. Section **A** has **one** compulsory question carrying 40 marks.
3. Section **B** has **three** questions and only **two** questions are to be attempted.  
Each question carries 20 marks.
4. Section **C** has **two** questions and only **one** question is to be attempted. Each question carries 20 marks.
5. Tables are provided on page 10.
6. Please read further instructions on the answer book.

## SECTION A

### Question 1

M/S Tear Fumes Ltd. is considering a major investment drive, and are evaluating the returns and risks associated with a number of projects. The Board of Directors hired an investment consultant to prepare a comprehensive business plan to be used in their new investment drive.

The company has now decided to invest in the production of plastic bullets given the increasing amount of public violence in the Kirapa City. Kirapa City Council will automatically be the major customer for the products. The expected useful life of the plant is only 5 years.

The Consultant undertook an analysis of the proposed project and the main features of her analysis are shown below. However, to the disappointment of the Board, she recommended that the project should not be undertaken because the estimated annual accounting rate of return is only 12.3%.

The Board of M/S Tear Fumes Ltd. have now recruited a new finance manager, Mr. Wabwir Emond to oversee the company's new investment drive.

|  | Year 1       | Year 2       | Year 3       | Year 4       | Year 5       |
|--|--------------|--------------|--------------|--------------|--------------|
|  | Shs '000'    | Shs '000'    | Shs '000'    | Shs '000'    | Shs '000'    |
| Cumulative investment in working capital | <u>400</u>   | <u>500</u>   | <u>600</u>   | <u>700</u>   | <u>700</u>   |
| Sales                                    | <u>3,500</u> | <u>4,900</u> | <u>5,320</u> | <u>5,740</u> | <u>5,320</u> |
| Materials                                | 535          | 750          | 900          | 1,050        | 900          |
| Labour                                   | 1,070        | 1,500        | 1,800        | 2,100        | 1,800        |
| Overheads                                | 50           | 100          | 100          | 100          | 100          |
| Interest                                 | 576          | 576          | 576          | 576          | 576          |
| Depreciation                             | <u>900</u>   | <u>900</u>   | <u>900</u>   | <u>900</u>   | <u>900</u>   |
|  | <u>3,131</u> | <u>3,826</u> | <u>4,276</u> | <u>4,726</u> | <u>4,276</u> |
| Profit before tax                        | 369          | 1,074        | 1,044        | 1,014        | 1,044        |
| Tax                                      | <u>111</u>   | <u>322</u>   | <u>313</u>   | <u>304</u>   | <u>313</u>   |
| Net profit                               | <u>258</u>   | <u>752</u>   | <u>731</u>   | <u>710</u>   | <u>731</u>   |

The project will require an initial investment of Shs 4,800,000; which will include the initial investment in working capital of Shs 300,000.

### Additional information:

- (i) Selling prices, working capital requirements and overhead expenses are expected to increase by 5% per year.
- (ii) Material costs and labour costs are expected to increase by 10% per year.
- (iii) Capital allowances are allowable for taxation purposes against profits at 25% per year on a reducing balance basis.

- (iv) Tax is at 30% on profits, payable one year in arrears.
- (v) Non-current assets have no expected salvage value at the end of the five years.
- (vi) The cost of capital is 15%.
- (vii) You may also assume that all receipts and payments arise at the end of the year to which they relate, except those in Year 0, which occur immediately.

**Required:**

- (a) Suggest the possible components of the business plan which the consultant might have included in her “comprehensive business plan” in the attainment of M/s Tear Fumes Ltd’s major investment drive.

**(8 marks)**

- (b) Advise the Board of Directors of M/S Tear Fumes Ltd. on whether the project should be undertaken.

**Note:** Use the NPV approach in your analysis, showing all the relevant workings.

**(14 marks)**

- (c) Calculate by how much the discount rate would have to change to result in a net present value of approximately zero.

**(4 marks)**

- (d) Describe how sensitivity analysis might be used to assist in assessing this project.

**(3 marks)**

- (e) List the weaknesses of sensitivity analysis in capital investment appraisal?

**(3 marks)**

- (f) (i) Give an explanation for Modigliani and Miller’s hypothesis assertion that the value of the firm is independent of its debt policy?

**(2 marks)**

- (ii) What is the reality then, about this assumption?

**(2 marks)**

- (g) In practice, a firm may either adopt a “conservative approach” or an “aggressive policy”, in financing its current and non-current assets. Explain the difference between the two terminologies as used above.

**(4 marks)**

**(Total 40 marks)**

**SECTION B****Question 2**

- (a) Explain the difference between debtors' average collection period and debtors' aging schedule?

**(3 marks)**

- (b) Why is a debtors' aging schedule more useful than the debtors' average collection period when analyzing debtors?

**(3 marks)**

- (c) Worldwide Cobe Café Ltd. is an unlisted company providing computer software support, internet services and also producing computer chips. It was established in 2000 and has realized tremendous growth over the years. However, raising finance for the new projects remains a daunting task and is usually contentious.

Given below are their financial statements for the year ended 31 December 2006:

**Balance sheet****Shs '000'****Non-current Assets**

|                               |                  |
|-------------------------------|------------------|
| Property, plant and equipment | 1,050,000        |
| Goodwill                      | <u>140,000</u>   |
|                               | <u>1,190,000</u> |

**Current Assets**

|                   |                  |
|-------------------|------------------|
| Inventory         | 490,000          |
| Trade receivables | 350,000          |
| Cash              | <u>70,000</u>    |
|                   | <u>910,000</u>   |
|                   | <u>2,100,000</u> |

**Financed by:**

|                          |                  |
|--------------------------|------------------|
| Issued share capital     | 140,000          |
| Borrowings               | 840,000          |
| Preference share capital | 280,000          |
| Retained earnings        | <u>280,000</u>   |
|                          | <u>1,540,000</u> |

**Current liabilities**

|                |                  |
|----------------|------------------|
| Trade payables | 280,000          |
| Taxation       | 100,000          |
| Other payables | <u>180,000</u>   |
|                | <u>560,000</u>   |
|                | <u>2,100,000</u> |

**Income statement**

|                             | <b>Shs '000'</b>     |
|-----------------------------|----------------------|
| Sales                       | 1,400,000            |
| Cost of sales               | <u>(840,000)</u>     |
| Gross profit                | 560,000              |
| Administrative costs        | <u>(140,000)</u>     |
| Depreciation                | <u>(98,000)</u>      |
| Finance costs               | <u>(42,000)</u>      |
| Profit before taxes         | 280,000              |
| Tax                         | <u>(140,000)</u>     |
| Net profit after taxes      | 140,000              |
| Preference dividends        | <u>(17,000)</u>      |
|                             | 123,000              |
| Proposed ordinary dividends | <u>(25,000)</u>      |
| Retained earnings           | <u><u>98,000</u></u> |

The ratios for the years 2004 and 2005 for Worldwide Cobe Café Ltd. and the industry ratios are given below:

|                                       | <b>2004</b> | <b>2005</b> | <b>Industry</b> |
|---------------------------------------|-------------|-------------|-----------------|
| Current ratio                         | 2.54        | 2.10        | 2.30            |
| Acid-test ratio                       | 1.10        | 0.96        | 1.20            |
| Trade receivables turnover            | 6.00        | 4.80        | 7.00            |
| Inventory turnover                    | 3.80        | 3.05        | 3.85            |
| Long-term debt to total capital ratio | 37%         | 42%         | 34%             |
| Net profit margin                     | 18%         | 16%         | 15%             |
| Interest coverage                     | 10          | 9           | 10              |

**Required:**

- (i) Evaluate the company's current financial position.  
(10 marks)
- (ii) Using relevant ratios indicate what decision would be taken if the company wanted to issue 16% debentures of Shs 300 million with a ten-year maturity.

(4 marks)

**(Total 20 marks)**

**Question 3**

- (a) In an effort to strategically position itself for the November 2007 Commonwealth Summit, CHOG (U) Ltd., a firm specializing in the distribution of exclusively Ugandan made crafts acquired No Longer at Ease (U) Ltd.

CHOG (U) Ltd. assumed all the assets and liabilities of No Longer at Ease (U) Ltd. The fair value of No Longer at Ease (U) Ltd's non-current and current assets were Shs 26 million and Shs 7 million respectively. Current liabilities were taken at book value while the fair value of debt was estimated to be Shs 15 million.

CHOG (U) Ltd. raised the required cash of Shs 15 million to pay No Longer at Ease (U) Ltd's shareholders by issuing shares worth Shs 15 million to its own shareholders. The balance sheets of the two firms before the above transactions; on 31 March 2007, were as shown below:

|                     | <b>CHOG (U) Ltd.</b> | <b>No Longer at Ease (U) Ltd</b> |
|---------------------|----------------------|----------------------------------|
|                     | <b>Shs '000'</b>     | <b>Shs '000'</b>                 |
| Non-current assets  | 37,000               | 24,000                           |
| Current assets      | <u>13,000</u>        | <u>8,000</u>                     |
|                     | <u>50,000</u>        | <u>32,000</u>                    |
| Shareholders' funds | 18,000               | 10,000                           |
| Borrowings          | 20,000               | 16,000                           |
| Current liabilities | <u>12,000</u>        | <u>6,000</u>                     |
|                     | <u>50,000</u>        | <u>32,000</u>                    |

**Required:**

- (a) Estimate the premium or goodwill on acquisition. **(2 marks)**
- (b) Prepare the balance sheet of CHOG (U) Ltd. immediately after the acquisition. **(8 marks)**
- (c) Discuss the reasons for mergers. **(4 marks)**
- (d) Kulembeka Equity Ltd. is an engineering holding company with a head office in Kampala and has various construction jobs in Southern Sudan. The company receives large payments on contracts as and when work is in progress. The cheques received from work in Southern Sudan are deposited in a local bank there and the money becomes available after 10 days. The cheques are mostly drawn on a bank in Juba. Kulembeka Equity

Ltd. is thinking of collecting the funds sooner by sending an accounts executive to Juba. A visit to Juba may cost Shs 10 million.

**Required:**

If Kulembeka Equity Ltd's opportunity cost of capital is 18%, what minimum amount of cheques will justify sending a person to Juba?

**(6 marks)**

**(Total 20 marks)**

**Question 4**

Bondic Bank (U) Ltd is soon venturing into mortgage financing to fill up the currently existing need for the service. During a recent research carried out by the bank's marketing team, middle class employees are eager to own houses of their own. Therefore, these would form the bulk of customers of the new product.

This new investment plan by the bank will, therefore, require substantial additional funds to be in place. To realize this new venture, the bank recently got listed on the Uganda Securities Exchange.

After one year of trading in the new product, the Board of Directors of Bondic Bank (U) Ltd. are discussing the level and nature of the company's next dividend payment. Three options are under consideration:

- (i) A cash dividend of Shs 15 per share,
- (ii) A 5% scrip dividend, or
- (iii) The bank repurchases 10% of the ordinary share capital at the current market price and then pays a cash dividend as in (i) above.

Summarised financial statements for Bondic Bank (U) Ltd. are shown below:

**Income Statement**

|                            | <b>Shs billion</b> |
|----------------------------|--------------------|
| Turnover                   | <u>150.0</u>       |
| Operating profit           | 15.0               |
| Net interest earned        | <u>4.0</u>         |
|                            | 19.0               |
| Taxation                   | <u>6.3</u>         |
| Available for shareholders | <u><u>12.7</u></u> |

**Balance Sheet**

|                                    | <b>Shs billion</b> |
|------------------------------------|--------------------|
| Ordinary shares (Shs 50 per share) | 20                 |
| Retained earnings                  | <u>90</u>          |
| Shareholders funds                 | <u>110</u>         |
| Non current assets                 | <u>60</u>          |
| <b>Current assets:</b>             |                    |
| Inventories                        | 20                 |
| Trade and other receivables        | 20                 |
| Cash and bank                      | <u>40</u>          |
|                                    | 80                 |
| Current liabilities                | <u>(30)</u>        |
|                                    | <u>110</u>         |

Bondic Bank (U) Ltd's current share price is Shs 400 cum div.

**Required:**

- (a) Calculate the expected effect of each suggestion on a shareholder who is a resident of Mbale Town, currently owning 1,000,000 shares. Explain briefly how accurate your estimates are likely to be. **(10 marks)**
  - (b) Outline the functions of the Uganda Securities Exchange. **(6 marks)**
  - (c) Explain the difference between fraud and money laundering. **(4 marks)**
- (Total 20 marks)**



## SECTION C

### Question 5

- (a) It is generally accepted that the strategic objective of an organisation is the long-term goal of the maximization of the wealth of the shareholders. However, there is always a strong influence of the various parties with interests in the firm which forces firms to adopt many non-financial objectives.

**Required:**

Discuss some of these non-financial objectives adopted by firms.

**(8 marks)**

- (b) In the last two decades, there has been a rapid growth of small businesses in Uganda. However, on the same note, the small business owners are increasingly disposing of them.

**Required:**

Discuss the reasons for the increasing sale of small businesses.

**(12 marks)**

**(Total 20 marks)**

### Question 6

- (a) Explain the differences between leasing and hire purchase financing.

**(4 marks)**

- (b) When evaluating lease financing, the concept of “net advantage” is often employed. Discuss.

**(6 marks)**

- (c) What are the specific objectives put forward by firms in favour of reorganization schemes?

**(4 marks)**

- (d) Explain the various types of reorganization schemes.

**(4 marks)**

- (e) Why do companies fail?

**(2 marks)**

**(Total 20 marks)**

**Table 1: PVIF- Present Value of Shs 1 Due at the End of n Periods**

| Period | 9%    | 10%   | 11%   | 12%   | 13%   | 14%   | 15%   | 16%   | 18%   | 20%   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1      | 0.917 | 0.909 | 0.901 | 0.893 | 0.885 | 0.877 | 0.870 | 0.862 | 0.847 | 0.833 |
| 2      | 0.842 | 0.826 | 0.812 | 0.797 | 0.783 | 0.769 | 0.756 | 0.743 | 0.718 | 0.694 |
| 3      | 0.772 | 0.751 | 0.731 | 0.712 | 0.693 | 0.675 | 0.658 | 0.641 | 0.609 | 0.579 |
| 4      | 0.708 | 0.683 | 0.659 | 0.636 | 0.613 | 0.592 | 0.572 | 0.552 | 0.516 | 0.482 |
| 5      | 0.650 | 0.621 | 0.593 | 0.567 | 0.543 | 0.519 | 0.497 | 0.476 | 0.437 | 0.402 |
| 6      | 0.596 | 0.564 | 0.535 | 0.507 | 0.480 | 0.456 | 0.432 | 0.410 | 0.370 | 0.335 |
| 7      | 0.547 | 0.513 | 0.482 | 0.452 | 0.425 | 0.400 | 0.376 | 0.354 | 0.314 | 0.279 |
| 8      | 0.502 | 0.467 | 0.434 | 0.404 | 0.376 | 0.351 | 0.327 | 0.305 | 0.266 | 0.233 |
| 9      | 0.460 | 0.424 | 0.391 | 0.361 | 0.333 | 0.308 | 0.284 | 0.263 | 0.225 | 0.194 |
| 10     | 0.422 | 0.386 | 0.352 | 0.322 | 0.295 | 0.270 | 0.247 | 0.227 | 0.191 | 0.162 |
| 11     | 0.388 | 0.350 | 0.317 | 0.287 | 0.261 | 0.237 | 0.215 | 0.195 | 0.162 | 0.135 |
| 12     | 0.356 | 0.319 | 0.286 | 0.257 | 0.231 | 0.208 | 0.187 | 0.168 | 0.137 | 0.112 |
| 13     | 0.326 | 0.290 | 0.258 | 0.229 | 0.204 | 0.182 | 0.163 | 0.145 | 0.116 | 0.093 |
| 14     | 0.299 | 0.263 | 0.232 | 0.205 | 0.181 | 0.160 | 0.141 | 0.125 | 0.099 | 0.078 |
| 15     | 0.275 | 0.239 | 0.209 | 0.183 | 0.160 | 0.140 | 0.123 | 0.108 | 0.084 | 0.065 |

**TABLE 2: PVAF - Present Value of an Annuity of Shs 1 per Period for n Periods**

| Period | 9%    | 10%   | 11%   | 12%   | 13%   | 14%   | 15%   | 16%   | 18%   | 20%   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1      | 0.917 | 0.909 | 0.901 | 0.893 | 0.885 | 0.877 | 0.870 | 0.862 | 0.847 | 0.833 |
| 2      | 1.759 | 1.736 | 1.713 | 1.690 | 1.668 | 1.647 | 1.626 | 1.605 | 1.566 | 1.528 |
| 3      | 2.531 | 2.487 | 2.444 | 2.402 | 2.361 | 2.322 | 2.283 | 2.246 | 2.174 | 2.106 |
| 4      | 3.240 | 3.170 | 3.102 | 3.037 | 2.974 | 2.914 | 2.855 | 2.798 | 2.690 | 2.589 |
| 5      | 3.890 | 3.791 | 3.696 | 3.605 | 3.517 | 3.433 | 3.352 | 3.274 | 3.127 | 2.991 |
| 6      | 4.486 | 4.355 | 4.231 | 4.111 | 3.998 | 3.889 | 3.784 | 3.685 | 3.498 | 3.326 |
| 7      | 5.033 | 4.868 | 4.712 | 4.564 | 4.423 | 4.288 | 4.160 | 4.039 | 3.812 | 3.605 |
| 8      | 5.535 | 5.335 | 5.146 | 4.968 | 4.799 | 4.639 | 4.487 | 4.344 | 4.078 | 3.837 |
| 9      | 5.995 | 5.759 | 5.537 | 5.328 | 5.132 | 4.946 | 4.772 | 4.607 | 4.303 | 4.031 |
| 10     | 6.418 | 6.145 | 5.889 | 5.650 | 5.426 | 5.216 | 5.019 | 4.833 | 4.494 | 4.192 |
| 11     | 6.805 | 6.495 | 6.207 | 5.938 | 5.687 | 5.453 | 5.234 | 5.029 | 4.656 | 4.327 |
| 12     | 7.161 | 6.814 | 6.492 | 6.194 | 5.918 | 5.660 | 5.421 | 5.197 | 4.793 | 4.439 |
| 13     | 7.487 | 7.103 | 6.750 | 6.424 | 6.122 | 5.842 | 5.583 | 5.342 | 4.910 | 4.533 |
| 14     | 7.786 | 7.367 | 6.982 | 6.628 | 6.302 | 6.002 | 5.724 | 5.468 | 5.008 | 4.611 |
| 15     | 8.061 | 7.606 | 7.191 | 6.811 | 6.462 | 6.142 | 5.847 | 5.575 | 5.092 | 4.675 |