

CERTIFIED PUBLIC ACCOUNTANT ADVANCED LEVEL 2 EXAMINATIONS

A2.1: STRATEGIC CORPORATE FINANCE

DATE: FRIDAY, 30 APRIL 2021

INSTRUCTIONS:

- 1. **Time Allowed: 3 hours 45 minutes** (15 minutes reading and 3 hours 30 Minutes writing).
- 2. This examination has two sections: A & B.
- 3. **Section A** has one Compulsory Question while **section B** has three optional questions to choose any **two**.
- 4. In summary attempt three questions.
- 5. Marks allocated to each question are shown at the end of the question.
- 6. Show all your workings where necessary.

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SECTION A

QUESTION ONE

Gihozo Plc is a company registered in Rwanda with the principal business activities of hotel and leisure. It is currently discussing investment opportunities brought on table by its Managing Director:

Investment opportunity one:

Taking over a small private company, Cyibitoke Ltd. The board of Gihozo Plc is in the process of making a bid for Cyibitoke but first needs to place a value on the company.

Gihozo Plc has gathered the following data related to the current year 2020:

Gihozo Plc

Weighted average cost of capital 12% P/E ratio 12
Shareholder's required rate of return 15%

Cyibitoke Ltd

Current dividend payment (Year 2020) Frw 12

Past five years 'dividend payments Frw 15, Frw 17, Frw 18, Frw 21 and Frw 23

Current EPS Frw 37
Number of ordinary shares in issue 5 million

It is estimated that the shareholders of Cyibitoke Ltd require a rate of return of 20 percent higher than that of shareholders of Gihozo Plc owing to higher level of risk associated with Cyibitoke operations. Gihozo Plc estimates that cash flows at the end of the first year will be Frw 250 million and these will grow at an annual rate of 5 per cent. Gihozo also expects to raise Frw 5 million in two years' time by selling off hotels of Cyibitoke that are a surplus to its needs.

The Managing Director of Gihozo Plc is currently discussing on the level of form of the company's next dividend. They are considering three options:

- 1. A cash dividend payment of Frw 20 per share;
- 2. A 6 percent scrip dividend;
- 3. A repurchase of 1.50% of ordinary share capital at the current market price.

Gihozo plc.'s financial statements for the current year are given below:

Profit or loss account

| | Frw million |
|------------------|-------------|
| Operating profit | 18 |
| Finance Income | <u>5</u> |
| | 23 |
| Tax charges | (<u>7)</u> |
| Profit after tax | 16 |

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| Statement of financial position | | |
|--|-------------|-------------|
| | Frw million | Frw million |
| Property, Plant and Equipment | | 70 |
| Current Assets: | | |
| Debtors | 22 | |
| Inventory | 21 | |
| Cash and Bank | <u>41</u> | |
| Total Current Asset | | 84 |
| Current liabilities | | (31) |
| | | 123 |
| Financed by | | |
| Ordinary share capital (Frw 5 per share) | 20 | |
| Reserves | 103 | |
| | | 123 |

The current cum dividend share is Frw 420

Investment opportunity two: Merging with Karibu Plc

The Board of Directors of Gihozo Plc. in the same extraordinary meeting is thinking of merging with Karibu Plc in the next year of 2021 and form a bigger 5 Star Hotel that will be registered under the name of Gubwaneza Plc. It has been agreed that Karibu's shareholders will accept three shares in Gubwaneza Plc for every share in Karibu they hold.

Forecasts of the year 2021 are as follows:

| | Gihozo Plc | Karibu Plc |
|----------------------|----------------|-----------------|
| Number of shares | 40 million | 10 million |
| Annual earnings | Frw 10 million | Frw 5.8 million |
| Price/earnings ratio | 8 | 10 |

Post –merger annual earning of the enlarged company is expected to be 8% higher than the sum of earnings of each of the companies before the merger, due to economies of scale and other benefits. The market is expected to apply a P/E ratio of 9% to Gubwaneza Plc.

Investment opportunity three:

Directors are further discussing to invest Frw 60 million in a project with a positive net present value.

Required:

(a) Estimate value for Cyibitoke Ltd using the following valuation methods:

(i) Gihozo Plc's Price/earnings ratio valuation. (3 Marks)

(ii) Dividend growth model. (5 Marks)

(iii) **Discounted** cash flow valuation. (4 Marks)

(b) What are the major considerations that Gihozo plc. has to take into account when deciding how to finance a proposed takeover of Cyibitoke Ltd. (8 Marks)

(c) Calculate the effect of three options proposed by Gihozo's Directors on wealth of shareholders owning 1,000 shares in Gihozo Plc. (11 Marks)

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- (d) Explain briefly how the company's dividend decision will be influenced by the opportunity to invest in a project of Frw 60 million highlighted by Gihozo's directors. (8 Marks)
- (e) Determine the extent to which the shareholders of Karibu Plc will benefit from the proposed merger. (9 Marks)
- (f) The Board of Directors of Cyibitoke Plc. Invite you to discuss three main decisions of finance in their company. Write a short e-mail to them outlining these three main decisions.

 (2 Marks)

(Total 50 marks)

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SECTION B

QUESTION TWO

Gatsibo Ltd is a company registered and operating its business in Rwanda. It invests in mining projects. The financial management team of the company is discussing how the company should appraise new projects to be implemented in the next year in Ndiza Hills of Ngororero District. Gatsibo Ltd has produced forecasts of relevant cash flows and other financial information associated with the new project. These are as follows:

Year 1 2 3 4

Investment pre-tax operating cash flows (Frw) 1,250,000 1,400,00 1,600,000 1,800,000

Other information:

- (i) The proposed project is expected to have a cost of Frw 4,400,000 payable at the start of the project, including Frw 600,000 for working capital and Frw 400,000 for issue costs. Frw 300,000 of issue costs is for equity and Frw 100,000 for debt. Issue costs are not tax allowable.
- (ii) The investment will be financed by 50% equity and 50% debt which is believed to reflect its debt capacity.
- (iii) Expected company gearing after the investment will change to 60% equity and 40% debt by market values
- (iv) The project equity beta is 1.5.
- (v) Debt finance for the project will be an 8% fixed rate debenture.
- (vi) Capital allowances are at 25% per year on a reducing balance basis.
- (vii) The risk-free rate is 4% and the market return 10%.
- (viii) The after-tax realizable value of the investment as a continuing operation is estimated to be Frw 1.5 million (including working capital) at the end of year 4.
 - (ix) Working capital may be assumed to be constant during the four years
 - (x) To implement the project, Gatsibo Ltd wants to acquire a digging machine of the brand caterpillar (x-250) and seeks to know whether to buy such a machine costing Frw 9,000,000 through a three years loan with interest of 17.14 percent per year is cost effective than leasing such a machine from Horizon Group plc. The machine, if bought, would have zero scrap value at the end of its three years life. Alternatively, if leased from Horizon, the lease payment is Frw 2,300,000 per year payable in arrears. Corporate income tax in Rwanda where Gatsibo is operating, is 30 percent which is payable at 31 March of the following year, and capital allowances are available over the life of the machine.

Required:

- (a) Using the expected NPV, assess whether the proposed project will be accepted by the Directors of Gatsibo Ltd. (10 Marks)
- (b) Describe strategies that could be followed by Gatsibo Ltd to deal with the problem of overtrading. (4 Marks)
- (c) Advise the finance team of Gatsibo Ltd whether they should buy or lease the machine.

(11 Marks)

(Total 25 Marks)

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QUESTION THREE

The Chief Finance Officer of Inkumburwa Plc, a company registered in Rwanda, is considering the purchase of packaging machine which will improve the appearance of the company's range of decorated cakes. He expects that the improved output will lead to increased sales of Frw 110,000 per year for a period of five years. At the end of the five year-period, the machine will be scrapped. Two machines are being proposed and the relevant information on the capital investment proposal form is as follows:

| | Machine A | Machine B |
|-----------------------------|------------------|------------------|
| Initial cost (Frw) | 200,000 | 250,000 |
| Labour costs (Frw) per year | 10,000 | 7,000 |
| Power costs (Frw) per year | 9,000 | 4,000 |
| Scrap value | Nil | 25,000 |

The following forecasts of average annual rates of inflation have been prepared by the budget department of Inkumburwa Plc.

Sales prices: 5% Per year Labour costs: 5% Per year Power costs: 3% Per year

Inkumburwa Plc pays corporate income tax of 30 percent one year in arrears and has a nominal after tax cost of capital of 15 percent. Capital allowances are available on a 25% reducing balance basis. The Managing Director (MD) opposed the idea of the Chief Finance Officer (CFO) and was proposing to invest in a portfolio of two securities X (60%) and Y (40%) instead of acquiring machines as recommended by CFO. The following information has been presented by MD:

| Security | Possible return | Probability |
|----------|-----------------|-------------|
| X | 30 | 30% |
| | 25 | 40% |
| | 20 | 30% |
| Y | 50 | 20% |
| | 30 | 60% |
| | 10 | 40% |

Required:

(a) Advise the Chief Finance Officer of Inkumburwa Plc on his choice of machine.

(14Marks)

- (b) Explain the difference between the nominal terms approach and the real terms approach to dealing with inflation in the context of investment assessment. (5 Marks)
- (c) Determine the expected return for a portfolio proposed by Managing Director of Inkumburwa and recommend the investment that should be undertaken by Inkumburwa to maximise return (whether to acquire machine or invest in securities)

(6 Marks)

(Total 25 Marks)

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QUESTION FOUR

City Valley Plc. has issued ordinary share capital of Frw 750 million with par value of Frw 2,000. The current market value of each share is Frw 3,500. The board of Directors of City Valley has decided, in its ordinary meeting of the first quarter of the year 2020, to raise new funds of 150 million by offering its existing shareholders the rights to subscribe for one new share at Frw 2,750 each for every four shares already held to finance a new project of installation of solar energy to its factory building which is currently perceived to consume high costs of electrical power.

After announcement of the issue, the ordinary share price falls to Frw 3,100 and remains at this level until the time of the rights issue.

City Valley Plc. wants to estimate the working capital required to continue its operating activities that would be retained from the raised funds. City Valley expects credit sales of Frw 25,000,000 in the next year 2021 and has estimated production costs as follows:

| | Frw' million |
|----------------------|--------------|
| Raw materials | 12 |
| Direct labour | 15 |
| Production overheads | <u>6</u> |
| | 33 |

Raw materials are in stock for an average of 21 days and finished goods are in inventory for an average of 28 days. All raw materials are added at the start of the production cycle, which takes five weeks and incur labour costs and production overheads at a constant rate. Suppliers of raw materials allow 24 days' credit, whereas customers are given 7 weeks to pay. The production takes place evenly throughout the year.

Required:

- (a) Calculate and explain the following:
 - (i) The theoretical ex-rights per share;
 - (ii) The New cash raised. (10 Marks)
- (b) Compared to other sources of finance for companies, explain why preference shares are not popular way of financing investments. (3 Marks)
- (c) Determine working capital required by City Valley Plc's operations in the year 2021.

 (6 Marks)
- (d) (d)In order to minimise the risk of bad debts, how can City Valley Plc assess the creditworthiness of its potential customers before allowing a 7 weeks payment term

(6 Marks)

(Total 25 Marks)

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