

## QUESTION 1

- (a) Outline the financial benefits and disadvantages inherent in a demerger and indicate circumstances where it might be an appropriate course of action. **(10 marks)**
- (b) East Ltd has been approached by a foreign government which is privatising its country's railway system. This country is politically unstable. It would like East Ltd to sign up for a four year joint venture which would require an initial investment by East Ltd of approximately GHC200 million. It is possible that the contract could be renegotiated at the end of the four year period. This is the first time that East Ltd's management has been asked to consider an investment overseas.

### **Required:**

Explain to East Ltd's management:

- (i) The strategies that East Ltd could employ to limit the effects of political risk within this proposal. **(7 marks)**
- (ii) How a Net Present Value (NPV) appraisal for this overseas investment might prove problematic for East Ltd compared to a normal Ghanaian-based appraisal. **(3 marks)**

**(Total: 20 marks)**

## QUESTION 2

- (a) Landy Ltd needs to invest in a motor van in order to distribute its products and have to choose between buying or leasing it. The motor van can be leased for a four year period at GHC40,000 per annum. The maintenance and service costs are included in the price. Alternatively, Landy can buy the motor van for GHC120,000 and at the end of four years, its residual value will be GHC20,000. The maintenance and service costs are estimated to be GHC13,000 each year. The company's cost of borrowing is 12%.

As a financial controller, you are required to advise Landy Ltd whether the company should lease or buy the motor van. (Ignore taxation) **(10 marks)**

- (b) Tinkler's Enterprise operates a large departmental store in the Western Region of Ghana, which was founded many years ago. Key figures from its financial statements for the year ended 31 May 2012 are shown below:

	GHCm
Revenue	10.00
Gross profit	3.00
Net profit	0.50
Land and buildings (book value)	10.00
Land and buildings (market value)	20.00
Long-term loans	5.00
Bank overdraft	1.00
Shareholders' funds	4.00

The Tinkler family holds 40% of the ordinary voting shares of the company. The shareholdings of the family have become widely dispersed around family trusts and individual family members. The last family members to be a part of the management of the business retired two years ago. The family is considering the following strategies put forward by the board for their consideration.

- (1) Borrow GHC1 million to develop key departments, with an estimated contribution of GHC200,000 per year before interest.
- (2) Sell the business in six months' time to a large rival in exchange for shares with a current market value of GHC10 million.
- (3) Sell the business in management buy out for GHC10 million, one half payable immediately and the other half in one year's time.
- (4) Close down the business immediately, this would incur estimated closure costs of GHC5 million.

**Required:**

Prepare a report advising the Tinkler family as to the merits and risks involved with the four financial strategies outlined above. **(10 marks)**

**(Total: 20 marks)**

**QUESTION 3**

- (a) Lambert Ltd is an all-equity printing company. It has 40 million ordinary shares in issue and a market capitalisation of GHC78.4 million (ex-div). Extracts from its financial statements for the year to 31 August 2012 are shown below:

	GHC'000
Profit before taxation	17,014
Less: Corporate tax at 28%	<u>(4,764)</u>
Profit after taxation	<u>12,250</u>

The dividend payout ratio was 100%. Annual earnings and the dividend payout ratio have not changed over the last few years and are expected to continue at present levels for the foreseeable future.

Lambert's senior management is considering altering the capital structure of the business and thereby "taking advantage of the tax shield". It plans to achieve this by buying back 20% of the company's equity shares and paying for this by issuing 9% irredeemable debentures at par. The share would be purchased for 10 pesewas per share above the current share price.

Accordingly, you, a member of Lambert's finance team, have been asked to demonstrate the impact of such a plan on the value of the company and its cost of capital.

You should assume a corporate tax rate of 28%.

**Required:**

- (i) Calculate Lambert's current cost of equity capital. (2 marks)
  - (ii) On the assumption that Lambert's current price-earnings ratio remains the same, advise Lambert's management of the effect of its share buy-back scheme on the company's:
    - (a) Total market capitalisation; (3 marks)
    - (b) Cost of equity; and (2 marks)
    - (c) Weighted Average Cost of Capital (3 marks)
  - (iii) Explain why Lambert's price-earnings ratio might fall rather than stay constant as a result of the change in its financial structure. (3 marks)
  - (iv) Explain the effect of the tax shield on a company's market capitalisation. (2 marks)
- (b) Pittway Company's next annual dividend is expected to be GHC4. The growth rate in dividends over the following three years is forecast at 15%. After that, Pittway's growth rate is expected to equal the industry average of 5%. If the required rate of return is 18%, what is the current value of the stock? (5 marks)

**(Total: 20 marks)**

**QUESTION 4**

- (a) Your brother is planning to retire in 18 years time. He currently has GHC250,000, and he would like to have GHC1,000,000 when he retires.

You are required to compute the annual rate of interest he would have to earn on his GHC250,000 in order to reach his goal, assuming he saves no more money.

**(6 marks)**

- (b) The prize in last week's lottery was estimated to be worth GHC35 million. If you were lucky enough to win, then it will pay you GHC1.75 million per year over the next 20 years. Assume that the first instalment is received immediately.

**Required:**

- (i) If interest rate is 8%, what is the present value of the prize? (5 marks)
- (ii) If interest rate is 8%, what is the future value after 20 years? (5 marks)
- (iii) How would your answers change if the payments were received at the end of each year? (4 marks)

**(Total: 20 marks)**

## QUESTION 5

- (a) Zimbo Ltd is a listed, all-equity financed company which manufactures parts for digital cameras. It is a relatively small operator in a rapidly changing market with high fixed costs. The company pays out all available profits as dividends.

Zimbo Ltd's stated capital consists of 150 million shares issued at GHC1 per share. On 30 September 2012 it expects to pay an annual dividend of 20p per share. In the absence of any further investment the company expects the next three annual dividend payments also to be 20p, but thereafter a 2% per annum growth rate is expected in perpetuity. The company's cost of equity is currently 15% per annum.

The Marketing Director is proposing a new investment in plant and equipment to manufacture equipment for digital televisions. This would require an initial outlay of GHC50 million on 30 September 2012. If this investment were financed by a 1 for 3 rights issue, it would enable the annual dividend per share to be increased to 21p on 30 September 2013 and all further dividends would be increased by 4% per annum. The new investment is, however, more risky than the average of existing investments, as a result of which the company's overall cost of equity would increase to 16% per annum if the company were to remain all-equity financed.

The Finance Director argues, however, to the contrary. 'It is nonsense to continue to be all-equity financed. I believe that we could finance the new investment by an issue on 30 September 2012 of 8% irredeemable debentures. Debt would be far cheaper than equity and the interest is available for tax relief'.

The Company Accountant has reservations. 'New debt finance would add financial risk on top of the existing high operating risk, which is a particular concern due to the uncertainty of future sales. I believe that we should continue to use equity finance, particularly with the additional risk of this new investment; a rights issue is the best way of doing this'.

The Managing Director is not sure of what to do.

Assume a corporation tax rate of 28%.

### **Required:**

- (1) Assuming that Zimbo Ltd remains all-equity financed, and using the dividend valuation model, calculate the expected ex-dividend price per share at 30 September 2012 on each of the following bases:
- (i) The new investment does not take place
  - (ii) The new investment takes place

Based on the above computations, determine whether the new investment should be undertaken. (8 marks)

- (2) As an external consultant to the company, advise the company on the implications of the new investment and the most appropriate method of financing.

Your advice should include an analysis of the concerns expressed by the Directors and the Company Accountant. (5 marks)

- (b) The Board of Directors of Crown Oil Ghana Limited have taken a decision to source a foreign loan facility to expand its business activities at the oil rig enclave. However, the Board is indifferent about the factors that affect their decision to hedge its market rate exposure.

You are required to:

Identify **four (4)** main factors that must influence the company's decision to hedge its interest rate risk. (4 marks)

- (c) Brown Limited has invested in bond security with the following data available on the bond:

Face value	GHC1,000
Coupon rate	16%
Redemption value	GHC1,000
Years to maturing	6
Yield to maturity	17%

**Required:**

How much must you pay for the bond security?

(3 marks)

(Total: 20 marks)