

P 4 June 2026

Section A

Question one (This question is compulsory and Contains 2 Parts, each Part Carries 25 Mark)

Part One Karari Company

Assume that you have been appointed finance director of Karari Co. The company is considering investing in the production of an electronic security device, with an expected market life of five years. The previous finance director has undertaken an analysis of the proposed project; the main features of his analysis are shown below.

Proposed electronic security device project:

Details	Year 0 (\$000)	Year 1 (\$000)	Year 2 (\$000)	Year 3 (\$000)	Year 4 (\$000)	Year 5 (\$000)
Non-Current Assets	4,500					
Working Capital	300	400	500	600	700	700
Sales		3,500	4,900	5,320	5,740	5,320
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		900	900	900	900	900
Total Costs		3,131	3,826	4,276	4,726	4,276
Taxable Profits		369	1,074	1,044	1,014	1,044
Taxation		129	376	365	355	365
Profit After Tax		240	698	679	659	679

All of the above cash flow and profit estimates have been prepared in terms of present day costs and prices as the previous finance director assumed that the sales price could be increased to compensate for any increase in costs.

You have available the following additional information:

- Selling prices, working capital requirements and overhead expenses are expected to increase by 5% per year.
- Material costs and labour costs are expected to increase by 10% per year.
- Tax allowable depreciation (tax deduction) is allowable for taxation purposes against profits at 25% per year on a reducing balance basis.
- Taxation of profits is at a rate of 35% payable one year in arrears.
- The non-current assets have no expected salvage value at the end of five years.
- The company's real after-tax discount rate (or weighted average cost of capital) is estimated to be 8% per year and nominal after tax discount rate 15% per year.
- Assume that all receipts and payments arose at the end of the year to which they relate except those in year 0 which occur immediately.

Required:

- Estimate the net present value of the proposed project. (15 Marks)
- Calculate by how much the discount rate would have to change to result in a net present value of approximately zero. (10 Marks)

(Total 25 Marks)

Question One - Part Two. It Carries 25 Mark and is composed of A & B

A. Kosti Company

The board of directors of Kosti Co. is considering making an offer to purchase Bara Co, a private limited company in the same industry. If Bara Co. is purchased it is proposed to continue operating the company as a going concern in the same line of business.

Summarized details from the most recent set of financial statements for Kosti Co. and Bara Co. are shown below:

	Kosti Co		Bara Co	
Details	SOFP on 31 March		SOFP on 31 March	
	(\$ M)	(\$ M)	(\$ M)	(\$ M)
Free-Hold Property		33		460
Plant & Equipment		58		1,310
Inventory	29		330	
Receivables	24		290	
Cash	<u>3</u>	<u>56</u>	<u>20</u>	<u>640</u>
Total Assets		<u>147</u>		<u>2,410</u>
Equity & Liabilities				

Ordinary Shares		35		160
Reserves		<u>43</u>		<u>964</u>
Shareholders' Funds		78		1,124
Medium Bank Loan		38		768
Current Liabilities		31		<u>518</u>
		<u>147</u>		<u>2,410</u>

Kosti Co, 50 cents ordinary shares, Bara Co, 25 cents ordinary shares.

	Kosti Co		Bara Co	
<u>Year</u>	PAT	Dividend	PAT	Dividend
	(\$ M)	(\$ M)	(\$ 000)	(\$ 000)
T 5	14.30	9.01	143.00	85.00
T 4	15.56	9.80	162.00	93.50
T 3	16.93	10.67	151.00	93.50
T 2	18.42	11.60	175.00	102.80
T 1	<u>20.04</u>	<u>12.62</u>	<u>183.00</u>	<u>113.10</u>

Note the following:

1. T5 is five years ago and T1 is the most recent year.
2. Bara Co.'s shares are owned by a small number of private individuals. Its managing director who receives an annual salary of \$120,000 dominates the company. This is \$40,000 more than the average salary received by managing directors of similar companies. The managing director would be replaced, if Kosti Co purchases Bara Co.
3. The freehold property has not been revalued for several years and is believed to have a market value of \$800,000.
4. The SOFP's value of plant and equipment is thought to reflect its replacement cost fairly, but its value if sold is not likely to exceed \$800,000. Approximately \$55,000 of inventory is obsolete and could only be sold as scrap for \$5,000.
5. The ordinary shares of Kosti Co are currently trading at 430 cents (ex div.) A suitable cost of equity for Bara Co. has been estimated at 15%. Both companies are subject to corporation tax at 33%.

Required:

1. Estimate the value of Bara Co. using the different methods of valuation and advise the board of Kosti Co. as to how much it should offer for Bara Co.'s shares. (15 Marks)
2. Note: There has been no increase in the share capital of Bara Co. over the last five years.

B. 15th April war

The damage caused by the 15th April war on the local economy infrastructure is not impossible to overcome. Discuss that from a finance point of view. (10 Marks)

(Total 25 Marks)

Section B
Answer only two questions from this section

Question One :

Medani Training Co. was established in 2000 and since that time it has developed rapidly. The directors are considering either a flotation or an outright sale of the company.

The company provides training for companies in the computer and telecommunication sectors. It offers a variety of courses using advanced modeling techniques. Medani employs a number of in-house experts who provide technical materials and other support for the teams that service individual client requirements. In recent years, it has diversified into the financial services sector and now also provides computer simulation systems to companies for valuing acquisitions. This business now accounts for one third of the company's total revenue.

Medani currently has \$10 million, 50c shares in issue. Halfa Co. is one of the few competitors in Medani's business. However, Halfa Co. is only involved in the training business. Halfa is listed on a small company investment market and has an estimated beta of 1.5. Halfa Co. has 50 million shares in issue with a market price of 580c. The average beta for the financial services sector is 0.9. Average market gearing (debt to total market value) in the financial services sector is estimated at 25%.

Other summary statistics for both companies for the year ended 31 December 2007 are as follows:

	<u>Medani</u>	<u>Halfa</u>
Net assets at book value (\$millions)	65	45
Earnings per share (c)	100	50
Dividend per share (c)	25	25
Gearing (debt to total market value)	30%	12%
Five year historic earnings growth (annual)	12%	8%

Analysts forecast revenue growth in the training side of Medani's business to be 6% per annum, but the financial services sector is expected to grow at just 4%.

Background information:

The equity risk premium is 3.5% and the rate of return on short-dated government stock is 4.5%.

Both companies can raise debt 2.5% above the risk free rate. Tax on corporate profits is 40%.

Required:

- A-** Estimate the cost of equity capital and the weighted average cost of capital for Medani Training Co. **(15 marks)**
- B-** Advise the owners of Medani Training on a range of likely issue prices for the company.

(10 marks)

Total (25 marks)

Question Two:

An investor holds 200,000 shares in Doco Co. and is considering buying some put options to hedge her investment. Doco's current share price is \$6. The risk free interest rate is currently 12% per year and the recent volatility of Doco Co shares has been 30% per year. She requires European put options with an exercise price of \$5 for exercise in two years' time.

Required:

(a) Calculate the value that the bank is likely to charge for 200,000 put options of the investor's required specification. **(9 marks)**

(b) Calculate the investor's change in wealth if she buys 200,000 put options to hedge her portfolio and the share price in two years' time is: **a)** \$3 per share, or **b)** \$10 per share.

(9 marks)

(c) A friend informs the investor that she could achieve a safer position by selling call options to construct a delta hedge. Calculate the number of call options to be sold to construct a delta hedge.

(7 marks)

Total (25 marks)

Question Three:

A. The International Monetary Fund (IMF) imposes certain economic policies on countries that need financial support. Explain some of these policies and its effects on those countries. Explain why these policies are criticised. **(7 marks)**

B. Discusses the reason for the existence of the global debt problem. Briefly explain how economic crisis might affect the global debt problem.

(9 marks)

C. Explain the main attempts that have been made to resolve the global debt problem and how governments might try to limit the effects the economic crisis.

(9 marks)

(Total 25 marks)

'End of questions'