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Practice Questions
Part 1

Chartered Accountancy
Strategic Level
Corporate Finance & Risk Management (CFRM)

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CORPORATE FINANCE & RISK MANAGEMENT

(SL2)

Strategic Level Examination - **June 2022**

Practice Questions on:

- ✓ **Long Term Financing**
- ✓ **Cost of Capital**
- ✓ **Capital Structure**
- ✓ **Valuations of Bonds & Shares**

SAMIRA ANTHONY

2015 June – CA SRI LANKA
Question 02.

Viva PLC is facing funding constraints to run its business operations. It has already borrowed Rs. 5 billion from banks (both short-term and long term funds), and is depending on rolling over commercial papers of Rs. 3 billion issued to large institutional funds (e.g. pension funds) at high interest rates of around 18% per annum. One of the non-executive directors of Viva has advised the board to opt for a Rs. 3 billion 5 year debenture issue rather than depending on short term funds.

Viva engaged Capital Investments (Pvt) Limited (CIPL) in an advisory capacity for the debenture issue. CIPL advised the board to opt for a 5 year 14% redeemable unsecured debentures of Rs. 3 billion, payable annually. The par value of the debenture is Rs. 1,000.

CIPL charges 0.5% as a placement fee on the issue value. Road show/marketing expenses amounted to Rs. 50 million.

A debenture prospectus was circulated to both local and foreign investors, and the response was positive.

The issue attracted Rs. 5 billion worth of applications.

	Rs.	No. of applications	Value
Bank guarantees	2.5 billion	5 applications	Rs. 500 million each
Cheques	2.5 billion	75 applications	Value varying from Rs. 10,000 – Rs. 9.9 million
Total	5.0 billion	80 applications	

The directors of Viva decided to allocate the debentures first amongst the smaller scale investors who have applied in the form of cheques, and the rest proportionately to the large institutional funds who have applied in the form of bank guarantees.

Required:

(a)**Differentiate** between the debenture issued by Viva and a zero coupon bond. (4 marks)

(b)**Design** the debenture holder ownership structure based on the directors' allocation basis, and **compile** the refunds scheme. (3 marks)

(c)**Calculate** the yield to maturity (YTM/ IRR) of the debenture issued by Viva, assuming the entire proceeds of the debenture issue were used to settle the commercial papers and the effective present value of savings made on this issue, assuming the WACC is 20%. (6 marks)

(d)Based on Viva's debentures, its competitor Deeva PLC also opts for a 5 year bond with an option to convert to shares. The bond is priced at 12% with the option to receive 40 shares per Rs. 1,000 nominal bond. The bond is currently trading at Rs. 1,250 and the shares are traded at Rs. 35 per share.

Advise whether the bondholder of Deeva should go for the conversion option based on the conversion premium/discount. (6 marks)

(e)Saman, an investor of Viva's debentures, now feels that an investment in one year fixed deposits in a bank would have been better than investing in the debentures of Viva.
Discuss the validity of the above view point of Saman and the use of Value at Risk (VaR) as a tool of risk assessment. (6 marks)
(Total: 25 marks)

Question 03 (based on common pre-seen case study)

In addition to the information given in the common pre-seen case study the following information is provided.
A special meeting has been called by the managing director of Partha Sarathi PLC (PSP), Mr. Partha, with his board of directors and heads of departments, to discuss on the offer received from Lanka Foods (Pvt) Limited (LFPL), to invest in their equity shares.
The income statements of LFPL for the last three years and the forecast income statement for the year ending 31 December 2015 were circulated to all participants prior to the meeting, along with the net present value analysis carried out by the Strategic Finance Team of PSP.

	Rs. million			
Years ending 31 December	2012	2013	2014	2015 Forecast
Revenue	2,688	3,225	3806	4,377
Cost of sales	1,989	2,258	2,626	3,064
Gross profit	699	967	1,180	1,313
Other income/gains	220*	252*	8	10
Investment income	4	11	14	32
Administrative and distribution expenses	467	711	843	885
Finance cost	59	56	52	50
Profit before tax	397	463	307	420
Income tax expenses	34	43	65	83
Net profit for the year	363	420	242	337

***Note 1** - The gain on disposal of land in 2012 and 2013 of Rs. 215 million and Rs. 250 million respectively are included under other income/gains

Note 2 - Par value of LFPL share is Rs. 10

PSP has appointed a reputed consultancy firm in Colombo, consisting of Chartered Accountants, to obtain consultancy services particularly in relation to matters specific to Sri Lanka. Given below are the important discussion points extracted from the meeting minutes which are to be shared with the consultancy firm.

Extract No. 1 - The finance director of PSP expressed his concerns over the increasing "Degree of Combined Leverage" (DCL) position of LFPL in the light of the current unstable political situation prevailing in Sri Lanka. He supported his view point with fluctuating stock market results for similar companies in the recent years. He continued to argue that the additional investments in automation will further increase the DCL which will result in a lower return on investment in case the business environment becomes volatile.

Extract No. 2 - The legal and compliance director presented a research paper drafted by his newly graduated legal officer. The major finding of the research paper was that issuing of ordinary shares to a non-resident company by a company registered in Sri Lanka, incorporated for the purpose of carrying a "*retail business*", is restricted in the event the non-resident company becomes the majority shareholder.

Extract No. 3 - The Head of Business Planning of PSP disagreed with the discounting factor used to evaluate this investment on the basis that PSP's current weighted average cost of capital (WACC) cannot be used for this investment appraisal due to various reasons.

He further suggested that calculating an appropriate cost of capital for this new project using the CAPM is important in order to understand the level of return expected by the market for a similar project before adjusting for any impacts due to different geographical presence and any other implications. Given below are some of the information collected by his team in this regard.

- LFPL, being unlisted, does not have a published beta so instead they have obtained a beta of 1.3 for a similar company that is listed. This company has a debt-equity ratio of 1:2, whilst LFPL has a debt-equity ratio of 1:3.5. The expected return on the Sri Lankan market is 15% and the risk-free rate is 8%. Further, it states that LFPL's cost of debt is 9%. The corporate tax rate is 30%.

- The following data were also presented by the business planning team of PSP with the view of setting up a WACC for the evaluation of international projects on the assumption that any fund raising will not alter the current debt-equity ratio.

PSP Data

Risk free rate	6%
Expected return on Indian securities	13%
PSP calculated beta	1.5
Cost of debt	8%
Debt-equity ratio	40:60
Effective tax rate	35%

Note – PSP's policy requires new investments to yield an additional 3% over the cost of capital for domestic investments, and 6% more for international investments.

Extract No. 4 - There have been a couple of discussions between Sureka and Mr. Partha on the total value of LFPL's equity share capital. Mr. Partha is of the view that Sureka has been over optimistic in estimating the growth rate of LFPL calculated based on the last couple of years' growth, and hence an unrealistic value is placed on LFPL's total equity shares valued at Rs. 3,150 million. Mr. Partha had concluded the discussions with a special remark saying that "the *investor of today does not profit from yesterday's growth".*

Given below is the information related to LFPL exchanged between the parties during the discussions in addition to the financial information already provided.

Property, plant and equipment would have a replacement cost of approximately Rs. 920 million and a sale value of Rs. 590 million (net book value of Rs. 754 million as at 31 December 2014). Similarly, raw material and finished goods would have a replacement cost of approximately Rs. 375 million and a sale value of Rs. 400 million (net book value of Rs. 337 million as at 31 December 2014). You may assume that replacement/realisable values of all the other assets/liabilities do not significantly differ from their book values. The industry's standard level of bad debts is 3% on sales.
Mr. Partha raised a question as to why the growth rate is so important to consider. He suggested that the value of a business should be determined on the adjusted net assets basis, which is the least complicated method to value the business.

Extract No. 5 - The Business Planning division of PSP has received the following additional information extracted from the financial statements of Northern Foods (Pvt) Limited (NFPL) as at 31 December 2014.
- Non-current liabilities : Rs. 200 million
- Current liabilities : Rs. 179 million

NFPL has been structured with 70% debt and 30% equity and the owner has already agreed to sell 60% of the shares, where the valuation is based on book value, adjusted for goodwill of Rs. 250 million. NFPL has an issued share capital of Rs. 100 million (10 million shares at Rs. 10).
Mr. Partha wanted to wrap up the meeting with a special note that international investment is a risky area to get in unless the foreign exchange rate exposure is managed well.
You are a newly qualified chartered accountant, attached to the consultancy firm in Colombo approached by PSP, who has been assigned to assist the team involved with this project.

Required:
(a)You have been requested to provide an independent opinion on various comments made by the finance director (Extract No.1) with reference to leverage measures.

(i)**Analyse** the Degree of Operating Leverage (DOL), Degree of Financial Leverage (DFL) and Degree of Combined Leverage (DCL) of LFPL for the years ended 31 December 2013, 2014 and 2015 (forecast) based on the normal course of business activities, with possible reasons for the current trend. (4 marks) (ii)**Evaluate** the validity of both concerns of the finance director over the increasing Degree of Combined Leverage (DCL) under the current unstable political situation and the additional investments in automation would further increase the DCL. (6 marks)

(b)The managing director of PSP was concerned about the major finding of the research paper presented by the legal and compliance director (Extract No.2).
Advise the board of directors of PSP about the Sri Lankan regulatory framework on non-residents becoming the majority shareholder, specifying excluded business activities, ownership controlled limited business activities and any other special provisions in this regard by giving due references to exchange control provisions. (6 marks)

(c)
(i) **Criticize** why the current discounting rate of PSP is inappropriate for the proposed investment in LFPL. (5 marks)
(ii) **Calculate** the asset beta and the equity beta of LFPL and an appropriate discounting rate that could be used by LFPL in their investment evaluations. (5 marks)
(iii) **Recommend** an appropriate WACC for PSP to use in investment appraisal of international investments in line with their corporate policy. (3 marks)

(d)
(i) **Advise** Mr. Partha as to why a difference exists between the value placed by Sureka and the adjusted net book values of the business, considering the basic approaches of valuation methods and their relative advantages and disadvantages. (6 marks)
(ii) **Explain** whether you agree with Mr. Partha's view "*the investor of today does not profit from yesterday's growth*". (3 marks)
(iii) **Recommend** the maximum and minimum values you would place on LFPL shares based on calculations carried out under the following bases of the net assets valuation method:
- Historic basis
- Replacement basis
- Realisable basis. (6 marks)

(e) LFPL has now shared information with PSP's management regarding their plans to acquire 60% of Northern Foods (Pvt) Limited (NFPL) ordinary shares (Extract No. 5). However, the negotiations have not yet been closed and LFPL's management considers different ways of settling the purchase consideration. PSP's management decided to advise Sureka to use the most appropriate value based on (d) (iii) above for preliminary negotiations. Given below are the options being evaluated:

- Settling in cash
- Share swap
- Combination of cash and share swap (50:50)

Advise Sureka on the best option to choose. (6 marks)

(Total: 50 marks)

2016 June – CA SRI LANKA
Question 01

ABC PLC (ABC) is a plantation company that experienced a sharp decline in its revenue and cash inflows during the last couple of years. In the first quarter of 2016, the price of ABC shares recorded its lowest in the last 5 years. The company had Rs. 4.5 billion of debt. The parent company (GHA PLC) made an announcement of their intention to sell all the shares in ABC and called for a Request for Proposal (RFP). ABC's CEO, together with the rest of the senior leadership team offered a bid of Rs. 70 per share to take the company private in a management buyout. The offer was declined as the minimum price expected by GHA was Rs. 87 per share. The total market capitalisation was valued at Rs. 20 billion (at Rs. 87 per share).

PQR is a large group of companies that has also shown interest in bidding for this RFP. Given below are some of the minutes extracted from their board meeting held to discuss on the same. The managing director of PQR started the discussion stating that according to his understanding, the key reason for ABC's inability to survive during this turmoil period was the high level of debt in their capital structure. Hence he was keen to acquire ABC and run the company with zero debt. The finance director of PQR confronted the managing director's view point and argued that a high debt position should be identified as an opportunity because it could help them to leverage their position. He also suggested that once ABC is acquired, all the free cash flows generated during the first 5 years of operation by ABC should be used to settle excessive debt and maintain debt levels at 25% of total capital employed, starting from 2021 onwards. He provided the following extracts derived from the forecasted free cash flow statement after factoring PQR's plans with ABC, once acquired.

Extracts of forecasted free cash flows

	Rs. million				
	2017	**2018**	**2019**	**2020**	**2021**
Net operating cash flow before interest and tax	1,954	2,642	2,853	3,128	3,452
Tax expense	(537)	(710)	(770)	(828)	(966)

Once the acquisition is completed a restructuring is anticipated. Given below are the estimated capital expenditure (CAPEX) and working capital (WC) related cash flows.

	Rs. million				
	2017	**2018**	**2019**	**2020**	**2021**
Capital expenditure	(470)	(460)	(472)	(484)	(495)
Working capital changes	180	220	(180)	(200)	(225)
Proceeds from sale of assets	3,200	1,625	-	-	-

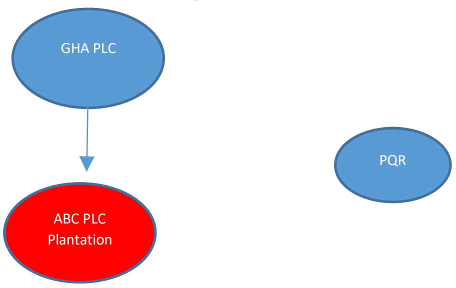
Given below are the expected interest payments on debt which will be incurred by PQR group on acquisition.

	Rs. million				
	2017	**2018**	**2019**	**2020**	**2021**
Interest payments	(3,046)	(2,704)	(2,800)	(2,965)	(3,136)

Other information

Cost of equity of a similar unlevered company	14%
Annual growth from 2021 onwards	3%
Pretax average cost of debt	13.5%
Cost of equity of a similar levered company	14.2%
Corporate tax rate	28%

Required:
(a) The finance director of PQR is not clear about the discounting rate to be used for this project appraisal as the capital structure will keep on changing during the next 5 years due to settlement of debts.
Discuss whether weighted average cost of capital (WACC) can be considered as an appropriate discounting rate in this situation to discount future cash flows, or whether there are any other alternative ways of handling the situation. (5 marks)



(b) **Explain** whether you agree with the view point of managing director of PQR that a zero debt capital structure is the most recommended option under the current condition. (3 marks)

(c) **Assess** the total market value of ABC that PQR could use to arrive at the maximum bidding price, if operated as an unlevered business as suggested by the managing director. (5 marks)

(d) **Explain** the tax benefit of a levered company compared to an unlevered company and quantify how much additional value can be placed on ABC's unlevered valuation calculated in part (c) above, assuming a debt ratio of 25% of total capital employed is maintained after 2021. (7 marks)

(e) Using the Adjusted Present Value (APV) approach for valuing ABC, **recommend** the maximum price per share that PQR group should bid in the negotiation process. (Show your calculations and assumptions clearly). (5 marks)

(Total: 25 marks)

Question 03 (based on the common pre-seen case study)

In addition to the information given in the common pre-seen case study, the following information is provided.

The finance director of Ruhunu Putra group emphasised the fact that its market price per share was gradually declining away from the book value per share, and that it needed immediate attention. As a result, a restructuring plan was put forward for board consideration as illustrated below.

Divestment of Ruhunu Putra Tea Export (Pvt) Limited (RPT)

There was an interested party to purchase all the shares of RPT held by Ruhunu Putra Energy PLC (RPE) and there were several discussions to agree on a selling price. However the final price for the deal has not been agreed by both parties as there is a major disagreement on the valuation of the business. The following additional information is available in respect of valuing RPT shares.

The market value of property, plant and equipment should be reduced by Rs. 105 million due to a permanent impairment over the value reported in the 2016 financial statements. Inventory should also be reduced by Rs. 10 million to match the correct market value. Trade and other receivables include long outstanding balances totalling Rs. 25 million that need to be written off in full. Both parties do agree that the value of RPT's brand name is Rs. 35 million. The average annual earnings for the last 5 year period were Rs. 35 million. The price earnings ratio of a similar business to RPT was estimated to be 12 times.

Further investments in the energy sector

The LP gas operation will be expanded to Bangladesh as a pilot project using the proceeds received from selling RPT. This will be set up as a joint venture with an existing local company operating in the energy sector, by equally contributing towards stated capital (50% ownership by each party). The initial investment has been estimated to be Rs. 1 billion and RPE will contribute Rs. 500 million, which is the minimum value expected from the sale of RPT.

The summarised forecasted income statement for the Bangladesh operation for the first 5 years is given below.

In Bangladeshi Taka (BDT) '000					
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Gross profit	382,460	476,670	624,960	634,710	626,650
Depreciation	(176,000)	(176,000)	(176,000)	(176,000)	(176,000)
Royalty fees to Sri Lankan head office	(10,360)	(14,460)	(19,370)	(21,630)	(24,150)
Administrative costs	(4,144)	(75,070)	(96,870)	(118,970)	(144,900)
EBIT	**191,956**	**211,140**	**332,720**	**318,110**	**281,600**
Interest cost	(157,900)	(143,630)	(128,120)	(111,310)	(91,950)
Profit before tax	**34,056**	**67,510**	**204,600**	**206,800**	**189,650**
Tax at 30%	-	(19,280)	(61,380)	(62,040)	(56,900)
Profit after tax	**34,056**	**48,230**	**143,220**	**144,760**	**132,750**
Average exchange rate 1 BDT = LKR	1.86	1.90	1.94	1.97	2.01

A royalty fee is payable to RPE for the use of the brand name and it will be remitted at the end of each year after deducting a withholding tax of 5%, paid at source. Dividends will be declared from Year 2 onwards, calculated at 50% on profit after tax and remitted to RPE at the end of each year subject to a withholding tax of 15%. The operation will come to a maturity stage by the end of Year 5 and the cash flows will remain at the same level with a zero growth rate from Year 6 onwards.

The legal and compliance director highlighted the gazette notification released on transfer pricing, the Extraordinary Gazette Notice No. 1907/26 issued by the Inland Revenue Department of Sri Lanka dated 25 March 2015. He requested the finance director to ensure compliance.

Group Treasury plans to recover the investment (Rs. 500 million) from its remittances (royalty and dividends) denominated in BDT, and convert them to USD in order to pay for LP gas purchases in USD. The finance director of RPE is planning to enter into a forward exchange contract to hedge the BDT exposure against USD for the first year. The current exchange rate is USD 1 = BDT 78.

Finance costs and other variables - RPE

Interest is calculated at 12% per annum (before tax) and the company pays corporate tax at 28%. The risk profile of the existing line of business leads to a beta factor of 1.5. A risk premium of 6% is expected by equity providers while the risk free rate is estimated to be 8% for the foreseeable

future. In addition 2% will be added to the weighted average cost of capital (WACC) for any cross border investment.
The number of shares outstanding for the year 2015/16 was 50 million. Assume that the market value of the debt of RPE equals its book value.

Required:
(a) The board of directors is keen to know the extent of dilution of the market price per share of the group as stressed by the finance director.
Advise the board on the above giving your view point with calculations, and comment on the validity of comparing market value per share against the book value per share from a theoretical perspective, giving due reference to RPE's current situation. (5 marks)

(b) **Discuss** possible reasons for the diluted market value per share of Ruhunu Putra group with the information provided in the common pre-seen case study, by considering each business sector. (7 marks)

(c)
(i) **Calculate** the value of RPT using the asset based and the earnings based valuation methods. (3 marks)
(ii) The finance director argued, "neither the asset based valuation method nor the earnings based valuation method is easily applicable in light of the RPT sale and instead recommend discounted cash flow method".
Evaluate the above comment made by the finance director. (5 marks)
(d) On account of any potential transfer pricing risk due to tax regulations on transfer pricing, the senior management of RPE is keen to adopt mechanisms to mitigate such risks.
Recommend five (05) key proposals to mitigate such transfer pricing risks. (5 marks)

(e)
(i) **Advise** the board of directors on the financial feasibility of the Bangladesh project from **RPE's perspective** as a cross border investment, along with the required calculations. (You may assume that the operation will continue at the Year 5 level for the foreseeable future). (10 marks)
(ii) **Explain** whether the minimum value recommended in part (c)(i) above should be revised based on the NPV calculations in part (e)(i) above, on the basis that the sales proceeds from RPT will be used for proposed cross border investment. (3 marks)
You are a senior manager working for a consultancy firm hired to evaluate the above restructuring plan.

(f)
(i) **Compare** the forward exchange contract with currency options as a hedging alternative in respect of Treasury's arrangement to convert BDT into USD in paying for LP gas. (5 marks)
(ii) **Assess** whether RPE will actually gain or lose from the currency hedge arrangement assuming that the forward rate of exchange offered by banks will simply reflect the interest differential in the two countries at any time.

The risk free interest rate in the United States is estimated to be 4% per annum and the equivalent rate in Bangladesh is 8% per annum. You may assume that USD has appreciated by 6% against BDT at the end of Year 1. (7 marks)

(Total: 50 marks)

2016 December – CA SRI LANKA
Question 03 (based on the common pre-seen)

A brief study carried out by Mahen made him realise the importance of a detailed analysis prior to the proposed share acquisition decision and the availability of an exit strategy in the event political influence dominates commercial terms. A decision was made to hire a consultancy firm, PQR company, to advise them. PQR was made aware at the initial meeting that Ajith and Mahen will make the investment, if any, through Alpha (Pvt) Ltd (APL) which is a partially debt financed company having a stated capital of Rs. 100 million.

Ajith made a strong point to Mahen that the sugar industry in Sri Lanka is predominantly influenced by the government. Hence a long term investment decision is too risky due to possible regulatory issues and political interference and planning must be done accordingly. They have decided to compare the Ask price of Ceylon Sugar (Pvt) Ltd (CSL) shares with the fair value, calculated independently, and make a decision to invest in CSL or look for any other alternative investment as described below, if the Ask price is too high to accept the offer.

Alternative investment plan

Mahen has approached a potential target firm, Sugar Distributers (Pvt) Ltd (SDL), as an alternative investment. This firm is fully equipped with all the modernised handling and distribution capabilities along with a large fleet of vehicles. The plan would be to invest in such a distribution firm and sign a contract with CSL shareholders for the next 4 years for a guaranteed supply of sugar as projected by CSL in deriving the projected statement of comprehensive income. This would give them access to a larger supply volume, without committing to a large sum of equity capital in CSL. SDL would also deploy modern plants to further process the final waste generated by CSL and come up with several by-products to strengthen the bottom line. The initial discussions have been successfully carried out with the directors of CSL and the outcomes are summarised below.

- SDL will act as consultants to CSL and deploy people and machinery wherever required to meet the objective as a managed service provider.
- SDL will charge an annual management fee calculated at 5% of the projected revenue of CSL for the next 4 years.
- CSL will agree to sell the entire production to SDL for the next 4 years and in return expect a lump sum amount payable to the shareholders in order to handover the management of the company along with the power to appoint directors to the main board of CSL.
- SDL will charge back its selling and distribution (S&D) expenses to CSL as entire selling and distribution is done through SDL's distribution lines. Annual S&D expenses will be calculated at 5% of the projected revenue of CSL.
- Production waste of CSL will be transferred to SDL at no cost.

The following incremental cash flows are expected by SDL in the event they sign the contract with CSL, in addition to the lump sum payment to be paid immediately and the management fees receivable.

	Rs. million				
	Year 0	Year 1	Year 2	Year 3	Year 4
Investment in machinery and recovery	(6,000)	-	-	-	6,000
Net income from core product sales	-	1,748	2,272	2,726	3,544
Net income from by-product sales	-	1,525	1,650	1,880	2,100
Net working capital	(800)	(90)	(40)	(175)	1,105
Tax payments	-	(964)	(1,167)	(1,375)	(1,698)
Capex	-	(250)	(150)	(175)	(250)
Other operational expenses including S&D expenses	-	(371)	(449)	(529)	(653)

Both Mahen and Ajith are of the view that investment in machinery should be financed through debt in such a way that capital repayment would happen at the end of Year 4. Given below are the two financing alternatives.

Financing alternative 1- Corporate bonds

Issue Rs. 6 billion (nominal value) of 10% corporate bonds at a 5% discount at the beginning of the project, to be repaid at the end of Year 4. The interest is payable at the end of each year.

Financing alternative 2- Bank loan

Arrange a credit facility with a commercial bank for the same amount as in financing alternative 1. The aggregate cost of debt stands at 9.5% after tax in today's terms.

Additional information

1. APL is engaged in the business of information technology with a beta factor of 1.8 and operates with a debt/equity (D/E) ratio of 30%. The long-term loan has been obtained at an interest rate of 14% per annum from a commercial bank. The risk free rate is assessed at 10% while the risk premium in the market is calculated to be 4%. However, there are not many quoted public firms for CSL to derive a similar beta factor from. The only listed firm operating in the market place records a beta factor of 1.14 while the D/E ratio is recorded at 40%. The tax rate is 28%.

2. Information available for CSL for the next 4 years.

(i) Cash flow projections

	Rs. million			
	2017/18	2018/19	2019/20	2020/21
Depreciation already included in the projected statement of comprehensive income	160	180	200	220
Capex	(275)	(355)	(490)	(700)
Investment in working capital	(75)	(125)	(200)	(315)

(ii) An annual growth rate of 5% is anticipated from Year 2021/22 onwards. Working capital will be maintained at the 2020/21 level while capex and depreciation will be maintained at the same growth rate of 5% from Year 2021/22 onwards.

3. Assume CSL's book value of debt (non-current and current portion of interest bearing liabilities) equals the market value, and the equity market value stands at Rs. 1,000 million.

4. At the most recent meeting held, Beta (Pvt) Ltd (BPL) communicated their minimum price for 49% of shares to be Rs. 12 billion without any supporting calculation of the valuation basis.

5. The weighted average cost of capital (WACC) of SDL has been estimated at 12% and they would add an additional 2% risk premium when evaluating investments in CSL.

Required:
(a)Mahen and Ajith wish to look at investment options from a risk assessment perspective.

Explain four (04) key types of risks associated from an investment decision perspective, given the circumstances, including how such risks are related to SDL/CSL. (6 marks)

(b)Based on CSL's financials for the year ended 31 March 2016, explain Mahen what is meant by a "serious loss of capital" with reference to the Companies Act. No. 07 of 2007. (4 marks)

(c)Ajith is of the opinion that investing in CSL shares is risky from an exit strategy viewpoint.
Explain three (03) alternative private equity exit strategies that both Ajith and Mahen could consider from a disposal perspective in the event they want to divest the stake in CSL, 4 years from now and recover their money with minimum losses. (6 marks)

(d)Mahen is of the view that investing through APL is not advisable as the current beta factor of APL is high and advises to invest directly in CSL to keep the required rate of return as low as possible.
(i)Calculate the WACC of CSL and APL as currently reported. (6 marks)
(ii)Discuss whether you agree with Mahen's view. (2 marks)

(e)
(i) The chief financial officer (CFO) of CSL is of the view that valuation of CSL shares is challenging due to many reasons.
Explain to Mahen and Ajith these possible challenging reasons. (4 marks)

(ii)Using discounted cash flow (DCF) based valuation for CSL, recommend a price to proceed negotiations with BPL for their stake. Clearly mention your assumptions. (8 marks)

(f)Subsequent meetings held with BPL requesting to reduce the minimum price for the 49% stake in CSL, have ended with no result. However, they seem to be interested in handing over the management of the company as explained under the "alternative investment plan".

Recommend a maximum price that can be offered to CSL shareholders, on the assumption that the **alternative investment plan** is fully implemented. (8 marks)

(g)**Advise** SDL's management on the selection between the corporate bonds and the bank loan including the impact on the D/E ratio arising from each financing alternative. (6 marks)

(Total: 50 marks)

2017 June – CA SRI LANKA
Question 02

Chas PLC (CPLC) is a reputed electrical engineering company. Its brand "Chas Electricals" is well established in the market. The latest financials of CPLC are given below.

Statement of profit or loss for the year ended 31 March	**2017 (Rs. million)**	**2016 (Rs. million)**
Revenue	1,535	1,250
Cost of sales	(1,100)	(900)
Gross profit	**435**	**350**
Other income	15	20
Administrative expenses	(250.3)	(225.8)
Selling & distribution expenses	(51)	(35.75)
Finance cost	(140)	(99)
Profit before tax	**8.7**	**9.45**
Income tax expenses (at 10%)	(0.87)	(0.945)
Profit after tax	**7.83**	**8.505**

Statement of financial position as at 31 March	2017 (Rs. million)	2016 (Rs. million)
Assets		
Non-current assets		
Property, plant & machinery	800.5	750
Intangible assets	10	10
Total non-current assets	**810.5**	**760**
Current assets		
Inventories	200.1	150.35
Trade receivables	350	250
Cash & cash equivalents	30	30
Total current assets	**580.1**	**430.35**
Total assets	**1,390.6**	**1,190.35**
Equity and liabilities		
Equity		
Stated capital (issued at Rs. 10 per share)	100	100
Capital reserves	60	60
Retained earnings	177.83	170
Total equity	**337.83**	**330**
Non-current liabilities		
Interest bearing borrowings	500	430
Retirement benefit obligations	131	129
Total non-current liabilities	**631**	**559**
Current liabilities		
Interest bearing liabilities	30	23
Trade payables	391.77	278.35
Total current liabilities	**421.77**	**301.35**
Total equity and liabilities	**1,390.6**	**1,190.35**

However, CPLC has grown very aggressively, over the last decade mainly funded by debt. Its gearing ratio has increased and it is finding it difficult to service the high cost of debt, most of which are placed through commercial papers with 20% interest per annum.

Assume you are the financial controller of CPLC.

Required:

(a) Analyse the factors impacting the return to the shareholders; and the movements in returns over the last two financial years. (6 marks)

(b) Discuss three (03) possible options available to CPLC to raise financing taking into account the financial position of the company. (6 marks)

(c) CPLC has a beta (β) of 1.25. Treasury bill yield is around 9.5% and the expected market return is 15%.
If an investor invests Rs. 10 million in shares of CPLC, compute the expected return on these shares. (3 marks)

(d) CPLC's shares are traded around Rs. 30 per share. The company has not paid dividends during the last several years. The directors wish to propose a dividend of Rs. 0.60 per share (60 cents) payable immediately after the AGM approval. The dividend is expected to grow at a rate of 10% per annum into the foreseeable future.

Evaluate the company's valuation based on:

- market capitalisation
- dividend growth model
- price/book multiple of 1.2 times

(5 marks)

(e) "Shareholders and debenture holders have different rights and returns, leading to potential conflicts of interest".

Discuss the above statement.

(5 marks)

(Total: 25 marks)

2019 December – CA SRI LANKA
Question 02

Dessi Coco PLC (DCP) is a leading desiccated coconut confectionery company listed on the Colombo Stock Exchange (CSE). Currently DCP's shares are trading at around Rs. 85 per share. Mr. Sumathi Perera, an investor, purchased 5 million shares of DCP last year at a price of Rs. 75 per share. The beta (β) value of the company's shares is 1.15.
On the CSE, any buy or sell transaction will incur a transaction cost of 1.2% of the investment value. This amount relates to CSE fees, brokerage etc. The CSE has yielded a market return of 15% per annum, whereas the treasury bill yields are around 9% per annum.

Required:
(a)**Calculate** the target price per share, for Sumathi, in order to achieve the expected rate of return from the investment. (7 marks)

The forecasted financials of DCP's current business in Sri Lanka for the year ending 31 March 2020 are given below.

	Rs. million
Turnover	10,000
Cost of sales	(4,500)
Gross profit	**5,500**
Administrative expenses	(1,300)
Selling and distribution expenses	(500)
Finance cost	(200)
Profit before tax	**3,500**
Tax at 14%	(490)
Profit after tax	**3,010**

The board of directors of DCP is confident that the company can increase its turnover by 15% by expanding into new territories in South Africa. However, due to intense marketing and set up costs, the profit before tax margin from the South African segment is estimated to be around 20%. The profits generated from South Africa are taxed at 10%. However, this income is not taxed in Sri Lanka, due to the government's incentive to promote agricultural exports.
DCP declares 40% of its profit after tax as dividends to its shareholders.

Required:
(b)Calculate the value of the DCP's business subsequent to its expansion in South Africa and DCP's value per share assuming that 90 million shares are outstanding. (7 marks)

(c)Advise Sumathi, whether he should retain or sell his shares based on (b) above. (3 marks)

Sumathi is keen to invest in rooftop solar panels. His monthly home electricity bill is Rs. 25,000. Finco, a leading solar company has submitted a proposal where the upfront investment in the solar panels is approximately Rs. 1.1 million. With the installation of solar panels, the electricity bill will reduce to Rs. 5,000 per month. Finco charges an operation and maintenance charge of 1% per annum on the investment, assuming a lifetime of 10 years. Sumathi is eligible for a 100% debt funding from a concessionary Asian Development Bank (ADB) funded line of credit at 8% per annum for a 5-year tenure.

Required:
(d)Assuming no drop in solar efficiency, advise Sumathi whether to invest in the rooftop solar panels, together with other non-financial factors that would need to be considered when deciding on such an investment.

(Hint: use net present value (NPV) method and discounted payback technique) (8 marks)
(Total: 25 marks)

June 2015 – ACCA

The treasury department of Chawan Co, a listed company, aims to maintain a portfolio of around $360 million consisting of equity shares, corporate bonds and government bonds, which it can turn into cash quickly for investment projects. Chawan Co is considering disposing 27 million shares, valued at $2·15 each, which it has invested in Oden Co. The head of Chawan Co's treasury department is of the opinion that, should the decision be made to dispose of its equity stake in Oden Co, this should be sold through a dark pool network and not sold on the stock exchange where Oden Co's shares are listed. In the last few weeks, there have also been rumours that Oden Co may become subject to a takeover bid.

Oden Co operates in the travel and leisure (T&L) sector, and the poor weather conditions in recent years, coupled with a continuing recession, has meant that the T&L sector is under-performing. Over the past three years, sales revenue fell by an average of 8% per year in the T&L

sector. However, there are signs that the economy is starting to recover, but this is by no means certain.

Given below are extracts from the recent financial statements and other financial information for Oden Co and the T&L sector.

Oden Co
Year ending 31 May (all amounts in $m)

	2013	2014	2015
Total non-current assets	972	990	980
Total current assets	128	142	126
Total assets	1,100	1,132	1,106
Equity			
Ordinary shares ($0·50)	300	300	300
Reserves	305	329	311
Total equity	605	629	611
Non-current liabilities			
Bank loans	115	118	100
Bonds	250	250	260
Total non-current liabilities	365	368	360
Current liabilities			
Trade and other payables	42	45	37
Bank overdraft	88	90	98
Total current liabilities	130	135	135
Total equity and liabilities	1,100	1,132	1,106

Oden Co
Year ending 31 May (all amounts in $m)

	2013	2014	2015
Sales revenue	1,342	1,335	1,185
Operating profit	218	203	123
Finance costs	(23)	(27)	(35)
Profit before tax	195	176	88
Taxation	(35)	(32)	(16)
Profit for the year	160	144	72

Other financial information (Based on annual figures till 31 May of each year)

	2012	2013	2014	2015
Oden Co average share price ($)	2·10	2·50	2·40	2·20
Oden Co dividend per share ($)	0·15	0·18	0·20	0·15
T&L sector average share price ($)	3·80	4·40	4·30	4·82
T&L sector average earnings per share ($)	0·32	0·36	0·33	0·35
T&L sector average dividend per share ($)	0·25	0·29	0·29	0·31
Oden Co's equity beta	1·5	1·5	1·6	2·0
T&L sector average equity beta	1·5	1·4	1·5	1·6

The risk-free rate and the market return have remained fairly constant over the last ten years at 4% and 10% respectively.

Required:

(b) Discuss whether or not Chawan Co should dispose of its equity stake in Oden Co. Provide relevant calculations to support the discussion.
Note: Up to 10 marks are available for the calculations. (20 marks)

June 2016 -ACCA

Question 02

Louieed Co,
a listed company, is a major supplier of educational material, selling its products in many countries. It supplies schools and colleges and also produces learning material for business and professional exams. Louieed Co has exclusive contracts to produce material for some examining bodies. Louieed Co has a well-defined management structure with formal processes for making major decisions.
Although Louieed Co produces online learning material, most of its profits are still derived from sales of traditional textbooks. Louieed Co's growth in profits over the last few years has been slow and its directors are currently reviewing its long-term strategy. One area in which they feel that Louieed Co must become much more involved is the production of online testing materials for exams and to validate course and textbook learning.

Bid for Tidded Co
Louieed Co has recently made a bid for Tidded Co, a smaller listed company. Tidded Co also supplies a range of educational material, but has been one of the leaders in the development of online testing and has shown strong profit growth over recent years. All of Tidded Co's initial five founders remain on its board and still hold 45% of its issued share capital between them. From the start, Tidded Co's directors have been used to making quick decisions in their areas of responsibility. Although listing has imposed some formalities, Tidded Co has remained focused

on acting quickly to gain competitive advantage, with the five founders continuing to give strong leadership.

Louieed Co's initial bid of five shares in Louieed Co for three shares in Tidded Co was rejected by Tidded Co's board. There has been further discussion between the two boards since the initial offer was rejected and Louieed Co's board is now considering a proposal to offer Tidded Co's shareholders two shares in Louieed Co for one share in Tidded Co or a cash alternative of $22·75 per Tidded Co share. It is expected that Tidded Co's shareholders will choose one of the following options:

(i) To accept the two-shares-for-one-share offer for all the Tidded Co shares; or,

(ii) To accept the cash offer for all the Tidded Co shares; or,

(iii) 60% of the shareholders will take up the two-shares-for-one-share offer and the remaining 40% will take the cash offer.

In case of the third option being accepted, it is thought that three of the company's founders, holding 20% of the share capital in total, will take the cash offer and not join the combined company. The remaining two founders will probably continue to be involved in the business and be members of the combined company's board.

Louieed Co's finance director has estimated that the merger will produce annual post-tax synergies of $20 million. He expects Louieed Co's current price-earnings (P/E) ratio to remain unchanged after the acquisition.

Extracts from the two companies' most recent accounts are shown below:

	Louieed $m	Tidded $m
Profit before finance cost and tax	446	182
Finance costs	(74)	(24)
Profit before tax	372	158
Tax	(76)	(30)
Profit after tax	296	128
Issued $1 nominal shares	340 million	90 million
P/E ratios, based on most recent accounts	14	15·9
Long-term liabilities (market value) ($m)	540	193
Cash and cash equivalents ($m)	220	64

The tax rate applicable to both companies is 20%.

Assume that Louieed Co can obtain further debt funding at a pre-tax cost of 7·5% and that the return on cash surpluses is 5% pre-tax.

Assume also that any debt funding needed to complete the acquisition will be reduced instantly by the balances of cash and cash equivalents held by Louieed Co and Tidded Co.

Required:

(a) Discuss the advantages and disadvantages of the acquisition of Tidded Co from the viewpoint of Louieed Co. (6 marks)

(b) Calculate the P/E ratios of Tidded Co implied by the terms of Louieed Co's initial and proposed offers, for all three of the above options. (5 marks)

(c) Calculate, and comment on, the funding required for the acquisition of Tidded Co and the impact on Louieed Co's earnings per share and gearing, for each of the three options given above. Note: Up to 10 marks are available for the calculations. (14 marks)

(25 marks)