SECTION A – CASE QUESTIONS (Total: 50 marks)

Answer ALL of the following questions. Marks will be awarded for logical argumentation and appropriate presentation of the answers.

CASE

Winning Tools Limited was founded in 1966 by two mechanical engineers, Alan Lee and Simon Ho, who both graduated from the same university. They were buddies at the university and then founded the company which was mainly involved in designing and manufacturing a number of machinery parts, including metal industrial presses and plastic molds, which were widely used in farm-equipment. After 20 years, the company had developed a strong reputation as an innovative and quality producer of industrial machinery and machine tools.

After years of strong earnings and predictable dividend growth, Winning Tools Limited's earnings growth has been hitting a wall for the past six years. As a result, the management, mainly comprised of the family members of the founders, implemented extensive business restructuring programmes. To fight the decline in sales and weak profit margins, the company has shifted a larger amount of its research and development budget from machine tool equipment to electrical industrial equipment. In addition, it has sold two unprofitable lines of businesses, eliminated three leased facilities and cut headcounts. These restructuring costs amounted to HK$60 million. However, the financial performance has still resulted in net losses. From 2009 to 2011, dividends per share were higher than earnings per share. In 2012, dividends were paid at a level below earnings. A small dividend was paid in 2013 due to the small profits reported by the company. In 2014, no dividend was declared by the board of directors. Nevertheless, in a special letter to shareholders, the board committed itself to resume dividend payments as early as possible, ideally in 2015.

Angel Chan, Financial Controller of Winning Tools Limited, needs to submit a recommendation to the company's board of directors regarding its dividend policy, which has been the subject of an ongoing debate among senior executives. Compounding her problem has been the overall weakness in the major economies including China, Japan, Europe and the US. The central bank of the US surprised the market by increasing interest rates two months ago (the last time it raised interest rates was 8 years ago). The stock market has had a 20% pullback in the past two months in response to worries over the global recession and increasing interest rates. As a result, the share price of Winning Tools Limited has dropped 36% in the past month to HK$16 a share. In response to the market collapse, some publicly listed companies in the same industry announced plans to repurchase their own stocks. Now Angel Chan's dividend policy decision has been complicated with a stock buyback alternative as well.

Exhibit 1

Consolidated statement of profit or loss for the year ended 31 December

	2014	2013
	$'000	$'000
Revenue	656,638	815,979
Cost of sales	(498,879)	(501,458)
Gross profit	157,759	314,521
Research & development costs	(85,417)	(70,545)
Selling, general & administrative expenses	(231,008)	(223,634)
Restructuring costs	(89,411)	-
Operating profit / (loss)	(248,077)	20,342
Other income / Interest expenses	(3,458)	1,065
Profit / (Loss) before tax	(251,535)	21,407
Income tax expense	750	(8,415)
Profit / (Loss) for the year	(250,785)	12,992

Additional data:

Earnings (loss) per share	$(2.13)	$0.11
Dividend per share	-	$0.03

Exhibit 2

Consolidated statement of financial position as at 31 December

	2014	2013
	$'000	$'000
ASSETS		
Non-current assets		
Property, plant & equipment	70,004	160,189
Other intangible assets	19,787	25,151
	89,791	185,340
Current assets		
Inventories	203,888	230,342
Trade receivables	187,235	208,541
Other current assets	20,714	22,183
Cash & cash equivalents	22,230	13,917
Prepaid expenses	13,016	14,259
	447,083	489,242
Total assets	**536,874**	**674,582**
EQUITY AND LIABILITIES		
Share capital (common stock)	126,762	126,729
Cumulative translation adjustment	20,208	(6,566)
Retained earnings	40,714	291,498
Less treasury stock at cost	(10,494)	(10,490)
Total shareholders' equity	177,190	401,171
Non-current liabilities		
Long term borrowings	8,775	9,000
Deferred tax	13,769	16,985
Deferred pension costs	64,329	44,790
Other non-current liabilities	5,444	2,318
Total non-current liabilities	92,317	73,093
Current liabilities		
Trade payables	34,239	36,449
Bank loans	71,345	34,195
Current portion of long term borrowings	150	300
Accruals and other payables	161,633	129,374
Total current liabilities	267,367	200,318
Total liabilities	359,684	273,411
Total equity and liabilities	**536,874**	**674,582**

Exhibit 3

Shareholder comparative data:

Year	2014	2004
Founders' families	26%	26%
Employees and families	12%	13%
Institutional investors		
Growth oriented	6%	17%
Value oriented	19%	8%
Individual investors		
Long term; retirement	12%	27%
Short term; trading oriented	13%	5%
Others	12%	4%
	100%	100%

Question 1 **(20 marks – approximately 36 minutes)**

Assume you are Angel Chan, the Financial Controller of Winning Tools Limited. Write a memorandum to the Board of Directors to address the following:

Required:

(a) **Identify and interpret the problems and uncertainties which you as Angel Chan, the Financial Controller of Winning Tools Limited, are facing.**

(6 marks)

(b) **Analyse the financial performance of Winning Tools Limited in 2013 and 2014 by calculating the following ratios: return on investment, debt ratio, current ratio, and asset turnover ratio.**

(11 marks)

(c) **Advise what typical loan covenant(s) may affect Winning Tools Limited's dividend policy with consideration of the ratios prepared in part (b).**

(3 marks)

Question 2 **(11 marks – approximately 20 minutes)**

(a) **Consider how the business restructuring and dividend decision will affect Winning Tools Limited's capital structure and unused debt capacity.**

(4 marks)

(b) **Consider whether a share repurchase decision is justified in Winning Tools Limited's situation. How would this affect the dividend decision?**

(3 marks)

(c) **Advise as to how the capital market would react to companies having a high or low dividend payout. Will the nature of the type of shareholders affect dividend policy at the company level?**

(4 marks)

Question 3 **(12 marks – approximately 22 minutes)**

(a) **Evaluate the effects of issuing HK$26 million of new debt and using the proceeds to repurchase shares on stock value. Identify the determinants of the magnitude of movement in stock value.**

(5 marks)

(b) **Assess what would happen to Winning Tools Limited's weighted average cost of capital if it issues HK$26 million of debt and uses the proceeds to repurchase shares.**

(3 marks)

(c) **Andy Kim, the Financial Manager of the company, bought the company's stock in the market before the official announcement, once he was aware of the repurchase stock plan in the meeting. Identify whether Andy has done anything wrong. Consider whether there is any way the company could reduce this kind of behaviour by its staff members.**

(4 marks)

Question 4 (7 marks – approximately 12 minutes)

Angel has emphasised managing the company using activity data instead of cost data. She believes that having a knowledge of the amount of time it takes to produce and deliver a product could lead to improvement. According to the Head of Production, Winning Tools Limited requires the following average time:

Transport products	3.2 hours
Manufacture products	7.2 hours
Inspect products	1.2 hours
Storing inventory	4.8 hours

Required:

(a) Calculate the company's manufacturing cycle efficiency (MCE). The industry average for the MCE is 82%. Analyse Winning Tools Limited's performance.

(5 marks)

(b) Discuss the possible mistakes if Winning Tools Limited tries to use MCE in measuring non-financial performance.

(2 marks)

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End of Section A

<u>SECTION B – ESSAY / SHORT QUESTIONS</u> (Total: 50 marks)

Answer ALL of the following questions. Marks will be awarded for logical argumentation and appropriate presentation of the answers.

<u>Question 5</u> (20 marks – approximately 36 minutes)

TTC is an established company in mainland China, focusing on the original equipment manufacturer ("OEM") business for overseas brand name mobile phone companies for over 10 years. It has built its reputation on lean manufacturing and is considered the price leader in this industry. It recently signed a contract with a customer to supply 500,000 units of a mobile phone, Model A, at a price of $1,000 per unit. The latest actual direct labour, direct materials, variable overhead and allocated fixed manufacturing overhead cost per unit, respectively, are $190, $320, $60 and $380.

Production costs in general are increasing in mainland China due primarily to rising salary and benefit costs. It is foreseen that the labour cost will increase at about 10% every year in the province where TTC's plant is located.

Most of the materials required for Model A are considered as commodities and are subject to market price fluctuation. TTC does not have much control over this cost.

Due to the recent downturn in the global economy, the demand for mobile phones has declined, hence the company has excess capacity in the fixed manufacturing overhead.

As one of the strategic development initiatives, the management is planning to develop its own brand of the next generation of mobile phones, Model X. The purpose is to achieve a higher profit margin compared to the OEM business. To launch Model X, additional costs in research & development, marketing (for brand building), customer services, abnormal materials wastage due to the learning curve, administration and finance are required. These costs are summarised below:

	All in $'000
Research & Development	2,900
Branding	4,000
Customer service	200
Termination cost (disposal of related assets, inventory write-off etc. at end of life cycle)	200
Abnormal inventory wastage of materials due to learning curve	50
Allocated human resources, administration and legal support. Work to be shared by existing relevant staff.	300
Loss on disposal of idle equipment to make room in the plant for the new production line	500

Over the life cycle of Model X, the management estimated that total revenue is about $10,000,000, costs of goods is $3,000,000, broken down into labour $900,000, materials $1,800,000 and manufacturing overhead $300,000.

TTC management target is to realise a 7% margin on the contract for Model A.

Required:

(a) **For Model A, evaluate if the existing cost structure is acceptable to TTC's management. Subject to your evaluation, advise the management with an explanation what alternative action(s) can be taken on the cost structure to reach the 7% gross profit margin target. Your advice should be specific in the context of the case.**

(7 marks)

(b) **Evaluate whether Model X can be developed on profitability grounds based on the following:**

- **Gross Profit**
- **Life Cycle Costing with an explanation of the treatment for the various types of costs.**

(9 marks)

(c) **Explain the advantages and disadvantages of Life Cycle Costing in decision making.**

(4 marks)

Question 6 **(18 marks – approximately 32 minutes)**

Company WYZ is a HK company in a high-end fashion design, manufacturing and retailing business wanting to enter the UK market, and has identified a target Company T for acquisition. Company T is a wholly owned subsidiary of a major and successful Retailer A in the UK. Retailer A is in the same industry as Company WYZ with operations in major cities of the UK and EU. This would be the first cross-border acquisition by Company WYZ. The due diligence process has revealed the following data about Company T.

(£'000s)	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	12,100	13,552	15,178	17,076	18,270
EBIT	2,178	2,440	3,036	3,416	3,472
Tax rate	30%	30%	30%	30%	30%
Depreciation	262	292	364	410	416
Capital expenditure	1,816	1,490	1,518	1,708	1,828
Working capital	2,784	3,090	3,340	3,416	3,472

Today, the only debt of Company T is £950,000. The effective tax rate is 30%. This year is Year 0 and Company T has working capital of £2.4 million. After negotiation, Company WYZ agrees to pay £7 million cash to acquire 75% of the equity of Company T and the use of Retailer A's brand for 5 years. The agreement stipulates that Company WYZ has to pay 30% of the purchase consideration in 30 days after the agreement and the remaining 70% in 3 months' time.

Company WYZ's weighted average cost of capital for this project is 15% and the free cash flow growth rate beyond Year 5 is 7%.

Company WYZ is concerned with the possible appreciation of the British Pound within the next 3 months, so the Board decides to use a forward foreign exchange contract to hedge the exchange rate risks.

The following are the forward rates provided by the bank.

Pound / HK$	Bid (bank buy)	Offer (bank sell)
Spot rates	12.8438	12.8488
Forward points:		
1 month	+0.0240	+0.0230
2 months	+0.0463	+0.0450
3 months	+0.0632	+0.0625

Required:

(a) **Based on the Free Cash Flow of the Firm model, determine the value of equity of Company T in British Pounds. Show your workings.**

(7 marks)

(b) **Calculate how much Company WYZ would have to pay in Hong Kong Dollars after hedging. Assume the British Pound appreciates by 2% from the spot rate at the two payment dates, calculate how much more Company WYZ will have to pay if it does not hedge.**

(6 marks)

(c) **Calculate how much is the premium in British Pounds, if any, is paid to the seller. Elaborate as to the possible reasons why Company WYZ is willing to pay such a premium.**

(5 marks)

Question 7 **(12 marks – approximately 22 minutes)**

The Board of Directors of HEE Limited Group (“the Group”), a Hong Kong Main Board listed conglomerate, is faced with three challenges: Undervaluation of assets, cash flow pressure and a hostile takeover bid.

The Group has grown successfully through leveraging until three years ago when profits started to slide as there is a constant turnover of senior management. The Group suffered a loss last year while the latest debt/equity ratio is 1:0.7. The interest coverage ratio is 1.5 times. The management is concerned as the interest rate is expected to increase by next year. HEE has two major subsidiaries, SA and SB.

SA: 100% owned and is a mature manufacturing business and a cash cow, providing stable income and cash flow, although it does not provide adequate liquidity to meet the group’s debt obligation. Management also believes the market currently undervalues the business.

SB: a Hong Kong company listed on the Growth Enterprise Market (“GEM”) Board, the Group owns 75% and it has a lot of good intangible assets and strong management team. The Board believes its value has not been fully reflected in the Group’s share price due to limited trading volume.

Recently, the Board received a hostile takeover bid, offering a substantially undervalued price. The Board has decided to defend against it.

A consultant has been hired to advise on the alternative actions. The consultant proposed that the Group should restructure by implementing the following downsizing strategies: (1) equity carve out to a private investor group, and (2) spin off.

Required:

(a) **To address the three challenges in the context of HEE Limited Group, identify and explain the most suitable downsizing strategy for SA and SB. Only one strategy should be chosen for each company and the same strategy cannot be applied twice.**

(8 marks)

(b) **Identify and interpret the issues the Board should consider further before implementing the chosen strategy.**

(4 marks)

* * * END OF EXAMINATION PAPER * * *