KAPLAN FINANCIAL

HKICPA
Qualification Programme

Module B

Corporate Financing

KPMG

Mock Exam 1

Questions

Exam No:

HKICPA 2012

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Professional Programme Module Examination	
Time allowed	**3 Hours**
Examination Assessment Allocation Section A – Case Questions Section B – Essay/Short Questions	 50 marks 50 marks
YOU SHOULD ANSWER ALL THE QUESTIONS IN THIS PAPER	

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

Mr. Leung is an ambitious executive who has just been appointed to the position of chief executive officer (CEO) of B-Group, a company listed on the Stock Exchange of Hong Kong. Mr. Leung regards his appointment as a temporary one, enabling him to gain experience before moving on to a larger organisation. His plan is to leave B-Group in three years time, with its share price standing high. Therefore, he is mostly concerned that B-Group's reported profits should be as high as possible in his third and final year.

Operations of B-Group

B-Group, together with its subsidiaries are structured under two major divisions;

1. Logistics division

It is principally engaged in the provision of integrated logistic services, which include the planning, procurement and logistics management of construction materials mainly for infrastructure projects in Yunnan Province; and the provision of logistics intelligence services including development, construction and maintenance of intelligence logistics systems.

Driven by the PRC's rapid economic growth throughout 2012, growth of market demand in transportation and logistics in the PRC has provided a golden opportunity for the business development of B-Group. The division realised a total turnover of approximately RMB4,352,022,000 in 2012, representing an increase of 21% compared to the same period in the previous year. Profit attributable to equity holders of B-Group was approximately RMB136,588,000, representing a growth of 25.55% compared to the same period in the previous year, while earnings per share amounted to RMB0.43. All of the division's core business segments have managed to deliver outstanding results on records, with increased operating revenues over the previous year.

The division has positioned itself as a construction material logistics services provider for large-scale infrastructure projects. It has been involved in the provision of construction materials for highway projects and infrastructure projects in Yunnan. As a result of this, B-Group's share of the market was further enhanced, strengthening its position as one of the premier logistics enterprises in Yunnan Province.

Business Plan

The division's mission is to become a leading material logistics services provider in the PRC. In order to pursue this mission, it plans to enhance its operational efficiency by developing an integrated platform for material logistics.

Integrated material logistics platform

The division's development of an integrated platform will enhance its logistics efficiency. Through collective procurement, it will be able to select high quality materials at low cost for its projects and achieve better control over procurement costs. The division can also strengthen its logistics services and ensure the smooth operation of its supply chain by improving its warehouse facilities, buildings and by better management of its delivery fleet.

Three projects (Anning, Baoshan, and Chuxiong) are being considered, each involving the immediate purchase of warehouses costing RMB200 million. Only one project can be undertaken, and the warehouses for each project will have a useful life equal to that of the project, with no scrap value. Mr. Leung favours the Chuxiong project because it is expected to show the highest accounting profit in the third year. However, he does not wish to reveal his real reason for his choice, and so, in his report to the chairman, Mr. Chan, he recommends the Chuxiong project because it shows the highest internal rate of return. The following summary is taken from his report:

	Net Cash Flow (RMB million)		
	Project Anning	Project Baoshan	Project Chuxiong
Year	Cash	Cash	Cash
0	-200	-200	-200
1	50	20	100
2	50	50	75
3	55	100	120
4	60	110	20
5	65	90	0
6	70	0	0
7	80	0	0
8	0	0	0
IRR	21.5%	19.7%	24.3%

IRR = Internal rate of return

Mr. Chan is accustomed to projects being appraised in terms of payback and the accounting rate, and he is consequently suspicious of the use of the internal rate of return as a method of project selection. Accordingly, Mr. Chan has asked for an independent report from Mr. Wong, the finance manager, on the choice of project. B-Group's cost of capital is 10% and a policy of straight-line depreciation is used to write off the cost of property, plant and equipment in the financial statements.

Mr. Leung suggested in his report that no depreciation is required for the warehouses since they are investment properties rather than property, plant and equipment. Warehouses are investment properties because rental is charged to the customers if they delay the receipt of cargoes from the warehouses.

2. Retail division

The division is mainly headed by Greater China Supermarket Limited ("GCS"). GCS and its subsidiaries are one of the first retail chain operators in the PRC. The group has over 20 years' experience in operating retail chains in the PRC and, since 1998, has been the largest retail chain operator in the PRC in terms of turnover.

As at 31 December 2012, the retail division had a total of 100 mega-malls, 1,500 supermarkets and 2,000 convenience stores located in 15 provinces in the PRC.

The division's mega-malls have operating areas ranging from 5,000 square meters (sq. m.) to 25,000 sq. m., usually located in less convenient areas. These mega-malls aim to cater for a broad range of customers' one-stop shopping needs, offering a broad range of products. GCS aims at maintaining competitive pricing on all its mega-mall products.

Compared to the mega-malls, the division's supermarkets are smaller and mainly located in densely populated residential areas to cater for customers' daily necessities. Goods are priced in terms of their categories and product mix, allowing for highly competitive pricing for promotional products.

The division's convenience stores target customers who need fast, convenient and 24-hour shopping services. The stores are much smaller and offer a selective range of products that are priced to have a higher gross profit margin compared to the mega-malls and supermarkets.

The division has actively expanded its business through franchising. The franchisees purchase goods from the group and are required to follow the group's operational policies and guidelines. The franchisees are wholly responsible for the performance of the franchised outlets.

GCS sees its business as having three different strategic units, the Mega-malls Unit, the Supermarkets Unit and the Stores Unit.

At the operational level, however, the retail division's outlets are divided geographically into hubs. The managers of these hubs are wholly responsible for the performance of the mega-malls, supermarkets and stores in their designated regions or provinces. Decisions on opening of new outlets and closing down existing ones are made after negotiations between the hub managers and the heads of each strategic unit.

Other operational decisions such as the level of inventory, the product mix and the extent of promotional discounts are made at the operational unit level.
Selected financial and operating information about the group's three strategic units are as follows:

	Mega-malls		Supermarkets		Stores	
	2012	**2011**	**2012**	**2011**	**2012**	**2011**
Number of outlets						
- directly owned	100	50	600	500	1,300	1,200
- franchised	-	-	900	800	700	500
Revenue (RMB$'m)	7,154	4,717	5,643	4,953	1,470	1,120
% to total	50%	44%	40%	46%	10%	10%
Gross profit (RMB$'m)	569	410	797	741	236	200
Gross profit margin (%)	7.95	8.69	14.12	14.96	16.05	17.86
Other income** (RMB$'m)	613	331	484	361	136	128
Total profit margin (%)	16.52	15.71	22.70	22.25	25.31	29.29
Operating profit (RMB$'m)	54	75	194	158	32	25
Operating profit margin (%)	0.75	1.59	3.44	3.19	2.18	2.23

** Other income mainly from suppliers for display and promotion in the outlets of the group.

Selected management information about the GCS's largest hub, the Shanghai Hub, and one of the hub's directly owned supermarkets, SH-SM, for the year ended 31 December 2012 is as follows:

	Shanghai Hub 2012 RMB$'000	**SH-SM 2012 RMB$'000**
Revenue	4,285,000	3,762
Cost of sales	(3,850,000)	(3,231)
Gross profit	435,000	531
Other income – display and promotion	529,000	807
Distribution and selling costs	(818,000)	(1,110)
Administrative costs	(63,000)	(59)
Operating profit	83,000	169
Segment assets:		
- non-current assets	432,000	946
- current assets	871,000	1,247
Segment liabilities – current liabilities	932,000	1,550

<u>Question 1</u> **(26 marks – approximately 47 minutes)**

<u>Required:</u>

Assume that you are Mr. Wong, the finance manager, you are required to draft a report for Mr. Chan, the Chairman of B-Group. In your report, you should:

(a) **briefly describe the main project appraisal methods and calculate the payback period, accounting rate of return and net present value for each of these projects (Anning, Baoshan and Chuxiong);**

(12 marks)

(b) **rank the projects and explain which project should be preferred by the ordinary shareholders of B-Group;**

(10 marks)

(c) **discuss the assumptions about the reactions of the stock market that are implicit in Mr. Leung's choice of the Chuxiong project.**

(4 marks)

[Total: 26 marks]

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

Required:

(a) **Identify the strategy at the business unit level adopted by the Mega-malls Unit, the Supermarkets Unit and the Stores Unit of the GCS.**

(6 marks)

(b) **Identify and evaluate the strategy adopted by the GCS at the corporate level.**

(5 marks)

[Total: 11 marks]

Question 3 **(13 marks – approximately 23 minutes)**

Required:

(a) **Determine the type of responsibility centre that the Shanghai Hub should be classified as. Determine and calculate the financial measures you consider most appropriate to Shanghai Hub for 2012 performance.**

(6 marks)

(b) **Determine the type of responsibility centre that the supermarket SH-SM should be classified as. Identify three possible financial measures that are appropriate in measuring performance and calculate the measures for the supermarket SH-SM's 2012 performance. Determine the financial measure you consider most appropriate to measure the performance of the manager of the supermarket SH-SM.**

(7 marks)

[Total: 13 marks]

* * END OF SECTION A * *
(QUESTIONS)

SECTION B - ESSAY/SHORT QUESTIONS (Total: 50 marks)

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

Question 4 **(17 marks – approximately 31 minutes)**

Dai Hing Co is a Growth Enterprise Market listed company that manufactures consumer products and it is planning to expand its existing business. The investment cost of $5 million will be met by a 1 for 4 rights issue. The current share price of Dai Hing Co is $2.50 per share and the rights issue price will be at a 20% discount on this.

The finance director of Dai Hing Co expects that the expansion of existing business will allow the average growth rate of earnings per share over the last four years to be maintained in the foreseeable future.

The earnings per share and dividends paid by Dai Hing Co over the last four years are as follows:

	2008	2009	2010	2011	2012
Earnings per share (cents)	27.7	29.0	29.0	30.2	32.4
Dividend per share (cents)	12.8	13.5	13.5	14.5	15.0

Dai Hing Co has a cost of equity of 10%. The price/earnings ratio of Dai Hing Co has been approximately constant in recent years. Ignore issue costs.

Required:

(a) Calculate the theoretical ex rights price per share prior to investing in the proposed business expansion.

(3 marks)

(b) Calculate the expected share price following the proposed business expansion using the price/earnings ratio method.

(3 marks)

(c) Discuss whether the proposed business expansion is an acceptable use of the finance raised by the rights issue, and evaluate the expected effect on the wealth of the shareholders of Dai Hing Co.

(5 marks)

(d) Using the information provided, calculate the ex div share price predicted by the dividend growth model and discuss briefly why this share price differs from the current market price of Dai Hing Co.

(6 marks)

[Total: 17 marks]

Question 5 **(17 marks – approximately 31 minutes)**

Three years ago, Bill Co built a factory in its home country costing $3.2 million. To finance the construction of the factory, Bill Co issued peso-denominated bonds in a foreign country whose currency is the peso. Interest rates at the time in the foreign country were historically low. The foreign bond issue raised 16 million pesos and the exchange rate at the time was 5.00 pesos/$.

Each foreign bond has a par value of 500 pesos and pays interest in pesos at the end of each year of 6.1%. The bonds will be redeemed in five years' time at par. The current cost of debt of peso-denominated bonds of similar risk is 7%.

The spot exchange rate is 6.00 pesos/$ and the 12-month forward exchange rate is 6.07 pesos/$. Bill Co can borrow money on a short-term basis at 4% per year in its home currency and it can deposit money at 5% per year in the foreign country where the foreign bonds were issued.

Taxation may be ignored in all calculation parts of this question.

Required:

(a) Briefly explain the reasons why a company may choose to finance a new investment by an issue of debt finance.

(7 marks)

(b) Calculate the current total market value (in pesos) of the foreign bonds used to finance the building of the new factory.

(4 marks)

(c) Assume that Bill Co has no surplus cash at the present time:

(i) Explain and illustrate how a money market hedge could protect Bill Co against exchange rate risk in relation to the dollar cost of the interest payment to be made in one year's time on its foreign bonds.

(4 marks)

(ii) Compare the relative costs of a money market hedge and a forward market hedge.

(2 marks)

[Total: 17 marks]

Question 6 **(16 marks – approximately 28 minutes)**

P Co, a company listed on a major stock market, is looking at its cost of capital as it prepares to make a bid to buy a rival unlisted company, NG. Both companies are in the same business sector. Financial information on P Co and NG is as follows:

	P Co		NG	
	$m	$m	$m	$m
Non-current assets		36		25
Current assets	7		7	
Current liabilities	3		4	
Net current assets		4		3
Total assets less current liabilities		40		28
Ordinary shares, par value 50c	15		5	
Retained earnings	10		3	
Total equity		25		8
Non-current liabilities				
7% bonds, redeemable at par in seven years' time		15		-
9% bonds, redeemable at par in two years' time		-		20
Total equity and non-current liabilities		40		28

Other relevant financial information:	
Risk-free rate of return	4.0%
Average return on the market	10.5%
Taxation rate	30%

NG has a cost of equity of 12% per year and has maintained a dividend payout ratio of 45% for several years. The current earnings per share of the company is 80c per share and its earnings have grown at an average rate of 4.5% per year in recent years.

The ex div share price of P Co is $4.20 per share and it has an equity beta of 1.2. The 7% bonds of the company are trading on an ex interest basis at $94.74 per $100 bond. The price/earnings ratio of P Co is eight times.

The directors of P Co believe a cash offer for the shares of NG would have the best chance of success. It has been suggested that a cash offer could be financed by debt.

Required:

(a) Calculate the weighted average cost of capital of P Co on a market value weighted basis.
(10 marks)

(b) Calculate the total value of the target company, NG, using the following valuation methods:

(i) Price/earnings ratio method, using the price/earnings ratio of P Co; and
(ii) Dividend growth model.

(6 marks)

[Total: 16 marks]

* * END OF EXAMINATION PAPER * *
(QUESTIONS)

