# SULIT



# BAHAGIAN PEPERIKSAAN DAN PENILAIAN JABATAN PENDIDIKAN POLITEKNIK KEMENTERIAN PENDIDIKAN TINGGI

JABATAN PERDAGANGAN

# PEPERIKSAAN AKHIR SESI JUN 2017

**APA9033: FINANCIAL MANAGEMENT 2** 

TARIKH : 1 NOVEMBER 2017

MASA : 8.30 PAGI – 11.45 PAGI (3 JAM 15 MINIT)

Kertas ini mengandungi **SEBELAS** (11) halaman bercetak. Soalan Esei (4 Soalan)

Dokumen sokongan yang disertakan: Formula, Jadual PVIF dan PVIFA

# JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN

(CLO yang tertera hanya sebagai rujukan)

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#### ESSAYS (100 marks)

Instruction: This section consists of FOUR (4) questions. Answer ALL questions.

## **QUESTION 1**

Filtrex & Co is considering a 1 for 5 rights issue at a 15% discount to the current market price of RM 4.00 per share. The issue costs are expected to be RM 220,000 and these costs will be paid out from the funds raised. It is proposed that the rights issue funds raised will be used to redeem some of the existing loan stock at nominal value. Financial information relating to Filtrex & Co is as follows:

Current statement of financial position	RM'000	RM'000
Non-current assets	1441 000	6,550
Current assets		
Inventory	2,000	
Receivables	1,500	
Cash	<u> 300</u>	
		<u>3,800</u>
Total assets		<u>10,350</u>
Ordinary shares (nominal value 50 sen)		2,000
Reserves		1,500
12% Ioan notes 2X12		4,500
Current liabilities		4,500
Trade payables	1,100	
Overdraft	1,250	
Overdiant	1,200	2,350
Total equity and liabilities		10,350
Total oquity and hadinties		20,000
Other information:		
Price/earnings ratio of Filtrex & Co:		15.25
Overdraft interest rate:		7%
Tax rate:		25%

C3

You are required to answer the following questions: a) Calculate the items below by ignoring issue costs and any use that may be CLO<sub>1</sub> made of the funds raised by the rights issue. C2 i. The theoretical ex rights price per share. ii. The value of rights per existing share [3 marks] CLO1 b) State THREE (3) alternative actions that are open to the owner of 1,000 C2 shares in Filtrex & Co as regards the rights issue. Determine the effect of each of these actions on the wealth of the investor. Show your calculations. [6 marks] CLO<sub>1</sub> c) Calculate the current earnings per share and the revised earnings per share if the rights issue funds are used to redeem some of the existing loan notes. C2 [6 marks] d) Explain briefly the concept of riba (interest) and how returns are made by CLO<sub>1</sub> Islamic financial instruments in Islamic Finance. C3 [4 marks] e) Discuss briefly THREE (3) reasons why interest rates may differ between CLO<sub>1</sub>

loans of different maturity.

[6 marks]

[25 marks]

#### **QUESTION 2**

a) UFTIN Berhad is an all equity financed listed company. Nearly all its shares are held by financial institutions.

The company's chairman has been dissatisfied with the company's performance for some time. Some directors are also concerned about the way in which the company is perceived by financial markets. In response, the company recently appointed a new finance director who advocates using the capital asset pricing model as a means of evaluating risk and interpreting the stock market's reaction to the company.

The following initial information was put forward by the finance director for two rival companies operating in the same industry:

	Equity Beta
Ruby Berhad	0.7
Rozy Berhad	1.4

The finance director notes that the risk-free rate is 5% each year and the expected rate of return on the market portfolio is 15% each year.

You are required to:

i.	Calculate, using the capital asset pricing model, the required rate of
	return on equity for both companies, Ruby Berhad and Rozy Berhad
	. [4 marks]

ii. Calculate the equity beta of UFTIN Berhad, assuming its required annual rate on equity is 17% and the stock market uses the capital asset pricing model to calculate the equity beta, and explain the significance of the beta factor.

[5 marks]

iii. Explain **THREE** (3) limitations of the capital asset pricing model (CAPM). [6 marks]

CLO 2 C3

CLO 2 C2

CLO<sub>2</sub>

C2

b) The following is an extract from the statement of financial position of Sofy Berhad at 31 December 2015.

M'000
200
850
500
000
9,550

The ordinary shares are quoted at 80 sen. The market's estimation of the next ordinary dividend is 4 sen, growing thereafter at 12 % per annum indefinitely. The preference shares which are irredeemable are quoted at 72 sen and the loan notes are quoted at nominal value. Tax on profit is 25%.

#### You are required to:

CLO2 C2 i. Use the relevant data above to calculate the company's weighted average cost of capital (WACC), ie the return required by the providers of the three types of capital, using the respective market values as weighting factors.

[7 marks]

CLO2 C3 ii. Assume that the loan notes have recently been issued specifically to fund the company's expansion programme under which a number of projects are being considered. It has been suggested at a project appraisal meeting that because these projects are to be financed by the loan notes, the cutoff rate for project acceptance should be the after-tax interest rate on the loan notes rather than the WACC. Discuss this suggestion.

[3 marks]

[25 marks]

#### **QUESTION 3**

CLO1 C4 a) Distinguish between weak form, semi-strong form and strong form stock market efficiency, and discuss the significance to a listed company if the stock market on which its shares are traded is shown to be semi-strong form efficient.

[13 marks]

b) Recent financial information related to Mezen Berhad, a stock market listed company, is as follows.

		RM m
Profit after tax (earnings) Dividends		60.5 40.0
Statement of financial position information	: RM m	RM m
Non-current assets		575
Current assets		<u>125</u>
Total assets		<u>700</u>
Current liabilities		70
Equity	80	
Ordinary shares (RM1 nominal)	<u>410</u>	490
Non-current liabilities 6% Bank loan 8% Bonds (RM 100 nominal)	40 100	140
Total liabilities and equity		$\frac{140}{700}$

Financial analysts have forecasted that the dividends of Mezen Berhad will grow in the future at a rate of 4% per year. This is slightly less than the forecasted growth rate of the profit after tax (earnings) of the company, which is 5 % per year. The finance director of Mezen Berhad thinks that, considering the risk associated with expected earnings growth, an earnings yield of 11% per year can be used for valuation purposes.

Mezen Berhad has a cost of equity of 10% per year.

You are required to:

CLO1 C2 i. Calculate the value of Mezen Berhad using net asset value method, dividend growth model and earnings yield method.

[6 marks]

CLO1 C3

- ii. Discuss THREE (3) weaknesses of the dividend growth model as a way of valuing a company and its shares in terms of:
  - i) The dividend growth rate
  - ii) Cost of equity
  - iii) Zero dividends

[6 marks] [25 marks]

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## **QUESTION 4**

CLO3 C3 (a) Explain any  $\mathbf{THREE}$  (3) methods of hedging foreign currency risks .

[9 marks]

CLO3 C3 (b) Explain the **THREE** (3) types of currency risk which are translation risk transaction risk and economic risk. [6 marks]

CLO3 C4 (c) Zola Berhad is a Malaysian company. The company has bought some goods from a US company at a cost of USD 5,000,000, paid in three months time. The finance director of Zola Berhad wishes to hedge against the foreign exchange risks, and the three methods which company will consider are:

i- Using forward exchange contracts

ii- Using money market borrowing or lending

iii- Making lead payments

The following annual interest rate and exchange rates are currently available:

	U:	SD	MYR			
	Deposit rate	Borrowing rate	Deposit rate	Borrowing rate %		
	%	%	%			
1 month	7	10.25	10.75	14.00		
3 months	7	10.75	11.00	14.25		

Exchange rate per MYR1.00

Spot

\$ 0.2289 - \$ 0.2276

1 month forward

\$ 0.2189 - \$ 0.2176

3 months forward

\$ 0.2088 - \$ 0.2075

You are required to help the finance director to find the cheapest method for Zola Berhad (ignore the commission costs). (10 marks)

[25 marks]

#### **END OF QUESTIONS**

#### Formulae Sheet

Economic order quantity

$$= \sqrt{\frac{2C_0D}{C_H}}$$

Miller-Orr Model

Return point = Lower limit +  $(\frac{1}{3} \times \text{spread})$ 

Spread = 
$$3 \left[ \frac{\frac{3}{4} \times \text{transaction cost} \times \text{variance of cash flows}}{\text{interest rate}} \right]^{\frac{1}{3}}$$

The Capital Asset Pricing Model

$$\mathsf{E}\!\left(\mathbf{r}_{i}\right) = \mathsf{R}_{f} + \beta_{i}\!\left(\mathsf{E}\!\left(\mathbf{r}_{m}\right) - \mathsf{R}_{f}\right)$$

The asset beta formula

$$\beta_{a} = \left[\frac{V_{e}}{\left(V_{e} + V_{d}(1-T)\right)}\beta_{e}\right] + \left[\frac{V_{d}(1-T)}{\left(V_{e} + V_{d}(1-T)\right)}\beta_{d}\right]$$

The Growth Model

$$P_{o} = \frac{D_{c} (1+g)}{(r_{e} - g)}$$

Gordon's growth approximation

$$g = br_e$$

The weighted average cost of capital

WACC = 
$$\left[\frac{V_e}{V_e + V_d}\right] k_e + \left[\frac{V_d}{V_e + V_d}\right] k_d (1 - T)$$

The Fisher formula

$$(1+i) = (1+r)(1+h)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 \times \frac{(1 + h_c)}{(1 + h_b)}$$
  $F_0 = S_0 \times \frac{(1 + i_c)}{(1 + i_b)}$ 

## Present Value Table

# Present value of 1 i.e. $(1 + r)^{-n}$

Where

r = discount rate

n = number of periods until payment

Discount\_rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	1
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	2
3	0.971	0.942	0.915	0.889	0.864	0.840	,0.816	0.794	0.772	0.751	3
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	4
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	्.0∙621	5
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	6
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	7
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	8
÷ 9	0.941	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	9
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	10
	0.000	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.305	11
11	0.896	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	12
12	0.887	0.788	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	13
13	0.879	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	14
14	0·870 0·861	0.738	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	15
15	0.901	0.743	0 042	0 333	Q - <del>1</del> 01	0 11,	0 00-				
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0.901	0.893	0.885	0-877	0.870	0.862	0.855	0.847	0.840	0.833	1
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694	2
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579	3
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482	4
5	0.593	0.567	0.543	0.519	0-497	0.476	0.456	0.437	0.419	0.402	5
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335	. 6
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279	- 7
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233	8
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194	9
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162	10
11	0.317	0.287	0.261	0.237	0.215	0 195	0.178	0.162	0.148	0.135	11
11	0.317	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112	12
12	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093	13
13	0.232	0.229	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078	14
14	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065	15
15	0.209	0.103	0 100	0 170	0 120	0 100					

## Annuity Table

Present value of an annuity of 1 i.e.  $\frac{1-(1+r)^{-n}}{r}$ 

Where

r = discount rate

n = number of periods

## Discount rate (r)

Periods (n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	1
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	2
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	3
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	4
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	5
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	6
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	7
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	8
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	9
10	9.471	8.983	8.530	8.111	7.722	7-360	7.024	6.710	6.418	6.145	10
11 -	10.37	9.787	9-253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	11
11 -	11.26	10.58	9·954	9.385	8.863	8·384	7.943	7 536	7.161	6.814	12
12	12.13	11.35	10.63	9.986	9.394	8.853	8.358	7.904	7.487	7.103	13
13	13.00	12.11	11.30	10.56	9.899	9.295	8.745	8.244	7.786	7.367	14
14 15	13.87	12.85	11.94	11 12	10.38	9.712	9.108	8.559	8.061	7.606	15
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	1
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528	2
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106	3
4	3.102	3.037	2.974	2.914	2-855	2.798	2.743	2.690	2.639	2.589	4
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991	. 5
6	4.231	4:111	3:998	3:889	3:784	3.685	3.589	3.498	3.410	3.326	6
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3 605	7
8	5.146	4.968	4.799	4.639	. 4.487	4.344	4.207	4.078	3.954	3.837	8
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031	9
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192	10
11	6-207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327	11
12	6.492	6 194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439	12
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533	13
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4 611	14
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4 876	4.675	15

End of Question Paper