TECHNICAL UNIVERSITY OF MOMBASA

School of business

DEPARTMENT OF ACCOUNTING AND FINANCE

UNIVERSITY EXAMINATIONS FOR DEGREE IN BACHELOR OF /
COMMERCE/ BUSINESS ADMINISTRATION.

BFI 4301; FINANCIAL MANAGEMENT.

END OF SEMESTER EXAMINATIONS

SERIES; MAY 2016

TIME;   2 HOURS

Instructions;

Answer question one and any other two questions.

Question One.

(a) Modigliani and miller advanced the concept that dividends payments or luck of it does not affect the shareholders since they would get the same when they finally decide to sell their shares. Briefly criticize the assumptions underlying this assertion. (10 marks)

(b) The concepts of profit maximization and wealth maximization have been touted as the main objectives of a business entity. Briefly differentiate the two concepts. (10 marks)

(c) Financial managers are key players in any Business entity. Briefly describe the desired qualifications that any financial manager should possess and how those qualifications enable him/her to carry out his/her role. (10 marks)

Question Two:

On my Own PLC has the following capital structure in 2006:   sk. 000

100,000 Ordinary shares of sh.10 each	1,000
40,000 Preference shares of sh.5 each	200
7% Redeemable Debentures sh.10 each)	200
Total	1,400

Additional Notes:

1. The ordinary shares have a current market value of sh.12 per share, and a dividend of sh.6 per share has just been paid. Dividend growth is expected to be at a rate of 12% per year.

2. The preference shares have a current market value of sh. 6 per share and the rate of dividend is 8%.

3. The redeemable debentures have a coupon rate of 7% and a current market price of sh.94 per 10 blocks.

4. Corporation tax rate is to be taken as 30%

Required:

(a) Calculate the weighted average cost of capital for on my Own PLC using market values
(10 marks)

(b) (b)   A company's net profit after tax is 6 million and the   Company has a   dividend payout policy of   60%. It has a share capital of 7.2 million at a nominal value of sh.10. The market price per share is currently at sh. 12.5
Required;

(i)   Earnings per share
(ii)   Dividends rate.
(iii)   Dividends cover
(iv)   Price earnings ratio
(v)   Dividends yield.   (10 marks)

Question   three

(a) A company expects its annual EBIT to be sh.50,000. The company has sh.200,000 in 10% bonds and the cost of equity is 12.5%.

Required;

Calculate of the weighted cost of capital of the firm using net Income (NI) approach.

(10 marks)

(b) Assume that the firm decides to retire sh.100, 000 worth of equity by using the proceeds of new debt issue worth the same amount. The cost of debt and equity would remain the same as in (a) above.

Calculate the new cost of capital using net operating income. (5 marks)

(c) Briefly explain the assumptions of Net Operating income.   (5 marks)

Question   Four.

Payback period is the best way to evaluate any investment decisions by financial managers. Discuss   (12 marks)

(b) Briefly e describe the theories used influence the capital structure of a business.(10 marks) activities.   (8 marks)

Question Five.

Kiwanda Limited is considering the purchase of a new machine. Two alternative machines, Pesi TZO and Upesi MO2, which will cost Sh.6, 000,000 and Sh.7, 000,000 respectively are available in the market. The cash flow after taxation of each machine are as follows:

Cash flow

Year	probability	Pesi TZO	Upesi MO2
		Sh.	Sh.
1	0.3	600,000	1,800,000
2	0.2	1,800,000	2,400,000

3	0.1	2,000,000	3,000,000
4	0. 2	3,000,000	1,800,000
5	0..2	2,400,000	1,600,000

Required

a)   Compute the net present value of each machine.

(8 marks)

b)   (i) Assuming that each machine represents a project:

Calculate the internal rate of return for each of the two projects.

(10 marks)

(ii) Comment on the use of the results obtained in (a) and (b)(i) above in selecting between the two projects.

(2 marks)

MARKING SCHEME.

Question one.

(a) Assumptions of dividends irrelevant theory.
- it ignores time value of money
- Assumes perfect market
- Assumes that consumers prefer future consumption thatn present
- No taxation.
- Investors have no ability to decide where to invest.
- Every shareholder wants to invest the dividends income.

(b)

- Risk. Profit maximization does not recognize risks while wealth maximization does. Risk refers to the possibility that actual returns may be less than the planed returns. As a rule, projects with potentials for higher returns also carry higher potential risks.
- Timing: Profit maximization does not take into account the timing of the profit/cash flow while wealth maximization does. Timing of the profit /cash flow brings in the concept of the time value for money.
- Measurement: A major problem in using profit maximization as the financial goal of the firm is the variability in the way firms measure profits. Any firm's profit can be changed appreciably by change in the accounting techniques. Example, Valuation of stock using either FIFO or LIFO gives different profits.

- Short-run versus Long-run objectives: Profit maximization tends to demand short-run planning strategies, which may not maximize wealth in the Long-run. e.g. Profit may be maximize by reducing the quality input hence reduction in cost, but this will not take long before the clients notice the reduction in quality hence a swift in the consumption of the product

(c) **Desired Qualities of a financial manager includes but not limited to being able to:**

- Interpret financial reports including income statements, Profits and Loss or P&L, cash flow statements and balance sheet statements

- Improve the allocation of working capital within business operations

- Review and fine tune financial budgeting, and revenue and cost forecasting

- Look at the funding options for business expansion, including both long and short term financing

- Review the financial health of the company or business unit using ratio analyses, such as the gearing ratio, profit per employee and weighted cost of capital

- Understand the various techniques using in project and asset valuations and apply critical financial decision making techniques to assess whether to proceed with

Question Two.

(a)	Market value (sh.000)	proportion	Cost	Weighted cost.
Cost of equity	1,200	0.737	0.62	0.457
Preference Shares	240	0.147	0.067	0.01
7% Debentures	188	0.115	0.052	0.006
				0.473

$$WACC = 47.3$$

(b) Net profit   6,000,000

Dividends paid   6,000,000 x 0.6   3,600,000

No. of shares   on issue 7,200,000/10   =   720,000

Dividend per share   3,600,000/720,000   =   5

Dividend yield   5/12.5   =   40%

Question Three.

   (a) Earnings before   interest and taxes (EBIT)   sh. 50,000

Less; Interest   cost (10% on sh. 200,000   sh. 20,000

Earnings before /after tax as taxes assumed to 0)   30,000

Earnings available   to equity shareholders   30,000

Cost of equity   12.5 %

Therefore, market value of equity = NI/KE = 30,000/12.5   = 240,000

Market value of debt (given as)   200,000

Total value of the firm   240,000 + 200,000   440,000

Overall cost of capital = EBIT/Total value x100

50,000/440,00 x100 = 11.36.

   (b) Earnings before interest and taxes (EBIT)   sh. 50,000

Less; Interest cost (10% on sh. 200,000   sh. 30,000

Earnings before /after tax as taxes assumed to 0) 20,000

Earnings available to equity shareholders   20,000

Cost of equity   12.5 %

Therefore, market value of equity = NI/KE = 20,000/12.5 = 160,000

Market value of debt (given as)   300,000

Total value of the firm 160,000 + 300,000   360,000

Overall cost of capital = EBIT/Total value x100

50,000/360,00 x100 = 13.89.

(c) The critical assumptions of this approach are:

   i.   The market capitalizes the value of the firm as a whole.
   ii.   Ko depends on the business risk. If the business risk is assumed to remain constant, then Ko will also remain constant.
  iii.   The use of less costly debt increases the risk of the shareholders. This causes Ke to increase and thus offset the advantage of cheaper debt.
   iv.   Kd is assumed to be constant.
   v.   Corporate income taxes are ignored.

Question Four.

Arguments for payback period.

The following are the important merits of the pay-back method:
1. It is easy to calculate and simple to understand.
2. Pay-back method provides further improvement over the accounting rate return.
3. **Pay-back method reduces the possibility of loss on account of obsolescence**

(b) Arguments against Payback Period

1.   Does not take into account time value of money and assumes that a shilling received in the 1st year and in the Nth year have the same value so as to rank them together to ascertain the PBP which is unrealistic given that a shilling now is valuable than a shilling N years from now.

2.   PBP method does not measure the profitability of a venture but rather measures the period of time a venture takes to pay back the cost. The method is outside looking (lender oriented rather than owner oriented).

3.   PBP method ignores inflows after PBP and as such, it does not accommodate the element of return to an investment.

4.   This method will not have any impact on the company's share prices because profitability which is one of the most important factors in gauging the company's value of shares is not a function of PBP and as such the method fall short of meeting the criteria of investment appraisal.

(b)

Capital structure theories;

-   Pecking order theory
-   Trade-off theory
-   Market timing theory
-   Free cash flow theory.   (10 marks)

Question Five.

b)- It enables the lessor user a facility which they cannot afford on their own.

- Operational conveniences – especially where the business is deemed to have a short life span or the economic situation is temporary.

 -    The desire to obtain "off balance sheet financing". When funds are borrowed to finance the purchase of an asset , the liability has a detrimental effect on the company's debt-equity ratio and other quantifiable indicators of riskiness. The purchased asset also increases the number of assets and therefore reduce the rate of return on assets.

- It is cheaper to lease than to buy. This is after considering the operational, tax and financial market advantages.

Question five.

Question Five.

a)   Computation of NPV

The discounting factor (present value interest factor PVIF) can be computed using the formulae $\dfrac{1}{(1+r)^n} = (1+r)^{-n}$

UPESI TZO

Year	Cash flow '000'	$PVIF_{10\%,n}$	P.V	$PVIF_{17\%,n}$	P.V
1	600	0.909	545.4	0.855	513.0
2	1,800	0.826	1,486.8	0.731	1,315.8
3	2,000	0.751	1,502	0.624	1,248.0
4	3,000	0.68	2,040	0.534	1,602.0
5	2,400	0.621	1,490.4	0.456	1,094.4
Total present value			7,064.4		5,773.2
Less initial capital			6,000.0		6,000.0
Net present value			1,064.6		(226.8)

UPESI MO2

Year	Cash flow '000'	$PVIF_{10\%,n}$	P.V	$PVIF_{17\%,n}$	P.V
1	1,800	0.090	1,636.2	0.855	1,539.0
2	2,400	0.826	1,982.4	0.731	1,754.4
3	3,000	0.751	2,251	0.624	1,872.0
4	1,800	0.68	1,224	0.534	961.2
5	1,600	0.621	993.6	0.456	729.6
Total present value			8,087.2		6,856.2
Less initial capital			7,000.0		7,000.0
Net present value			1,087.2		(143.8)

b)   Since both projects are yielding a positive NPV at 10% discounting, rediscount the cash flows again at a higher trial discounting to get a negative or zero NPV. Try 17% [done in part (a)].

Pesi TZO   **Upesi MO2**

NPV @ 12%   1,064.6   1,087.2

NPV @ I.R.R.   0   0

NPV @ 17%   -226.8   -143.8

   I.R.R. for Pesi TZO   = 10 + 7 ($\underline{1064.6}$) = 15.77 = 16%
                                      1,291.4

I.R.R. for Upesi MO2   = 10 + 7 ($\underline{1,087.2}$)= 16.18   = 16%
                                   1,231

b(ii)   -   Both projects have a positive NPV @ 12% cost of capital. However

              project   Upesi MO2 has higher NPV.

        Both projects produce I.R.R. greater than cost of capital. However, project Upesi MO2

         has higher I.R.R.

        -         Therefore, accept project Upesi MO2.