UGANDA MARTYRS UNIVERSITY, MBALE CAMPUS
UNIVERSITY EXAMINATIONS

FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT

END OF SEMESTER FINAL ASESSMENT

COURSE UNIT: CORPORATE FINANCE II

DATE: May, 2018

TIME ALLOWED: 3 hours: 9.00am – 12.00 noon

Instructions to Candidates:

Read the following before answering the questions

1. *Carefully read through ALL the questions before attempting*
2. ***ANSWER FOUR (4) Questions*** *(All questions carry equal marks)*
3. *No **names** should be written anywhere on the examination book.*
4. *Ensure that your **Reg. number** is indicated on all pages of the examination answer booklet.*
5. *Ensure your work is **clear** and **readable**. Untidy work shall be penalized*
6. *Any type of examination Malpractice will lead to automatic disqualification*
7. *Do not write anything on the questions paper.*

QUESTION 1

(a) Write short notes on the following:
   (i) The Indenture **[2 marks]**
   (ii) Zero-coupon bond **[2 marks]**
   (iii) Market risk **[2 marks]**
   (iv) Floating rate bond **[2 marks]**

(b) Differentiate between debt and equity securities **[8 marks]**

(c) State and briefly explain the factors that influence the value of share of a company. **[9 marks]**

QUESTION 2

(a) KCB Ltd has 10 million Shs 150 ordinary shares in issue with a current price of Shs 300 cum div. An annual dividend of Shs 50 has just been proposed. The company earns an accounting rate of return on equity (ROE) of 10% and pays out 40% of the return as dividends. The company also has 13% redeemable loan notes with a nominal value of Shs 7 billion, trading at Shs 1,050,000. They are due to be redeemed at par in five years' time.

Required: If the rate of corporation tax is 30%, what is the company's WACC? **[10 marks]**

(b) A company issued 10,000, 10% debentures of Shs 100 each on 1.4.2007 to be matured on 1.4.2012. If the market price of the debenture is Shs. 80.

Required: Compute the cost of debt assuming 35% tax rate. **[7 marks]**

(c) A company issues 1,000 15% debentures of the face value of Shs. 100 each at a discount of Shs. 5. The under-writing and other costs are Shs. 5000 for the total issue. The interest per annum is Shs. 15,000. The income tax rate is 40%.

Required: Calculate the cost of Debt. **[8 marks]**

QUESTION 3

(a) Explain the term "valuation" of securities **[3 marks]**

(b) The bonds of Indebted Nordic Ltd have a coupon interest rate of 9%. The interest on the bonds is paid semiannually, the bonds mature in 8 years, and their par value is Shs. 1,000. If the required rate of return, k_d = 8%:

(i) What is the value of each bond? **[4 marks]**

(j) What is the value of each bond if the interest is paid annually? **[3 marks]**

(c) Below is the Statement of Financial Position of Sweetex Ltd.

Liabilities & Equity	**Shs.**	**Assets**	**Shs.**
20,000 Equity shares of Shs. 10 each fully paid	200,000	Goodwill	30,000
1,000, 6% Preference shares of Shs. 100 each, fully paid	100,000	Land and building	100,000
Reserves	60,000	Plant and machinery	120,000
Sundry creditors	40,000	Investments at cost	60,000
Provision for taxation	20,000	Stock	50,000
Other liabilities	10,000	Debtors	40,000
	430,000	Cash at bank	24,000
		Preliminary expenses	6,000
			430,000

For the purpose of valuing the shares of the company, the assets were revalued as:

(i) Goodwill Shs. 50,000;
(ii) Land and Building at cost plus 50%,
(iii) Plant and Machinery Shs. 100,000;
(iv) Investments at book values;
(v) Stock Shs. 80,000 and Debtors at book value, less 10%.

Required: Ascertain the value of each Equity Share of the company. **[15 marks]**

QUESTION 4

(a) State and explain the major categories of the cost of capital. **[9 marks]**

(b) Calculate the cost of equity capital of Simple Ltd, whose risk free rate of return equals 10%. The firm's beta equals 1.75 and the return on the market portfolio equals to 15%. **[8 marks]**

(c) A company has paid a dividend of Shs. 100 per share (of face value of Shs.1,000 each) last year and it is expected to grow @10% next year. Calculate the cost of equity if the market price of share is Shs 5,000. **[8 marks]**

QUESTION 5

a) A company paid a dividend of Shs. 250,000 this year. The current return to shareholders of companies in the same industry is 12%, although it is expected that an additional risk premium of 2% will be applicable to the company, being a smaller and unquoted company. Compute the expected valuation of the company, if:

(i) The current level of dividend is expected to continue into the foreseeable future. **[7 marks]**

(ii) The dividend is expected to grow at a rate of 4% pa into the foreseeable future. **[8 marks]**

b) A company has the following financial information available:

b) Share capital in issue: 4 million ordinary shares at a par value of Shs. 50.

c) Current dividend per share (just paid) Shs. 24.

d) Dividend four year ago Shs. 15.25.

e) Current equity beta 0.80.

You also have the following market information:

(i) Current market return 15%.

(ii) Risk-free rate 8%.

Required: Find the market capitalization of the company. **[10 marks]**

QUESTION 6

a) Define the term "Capital structure" and briefly explain the main features of a sound capital structure of the firm. **[10 marks]**

b) What is factoring and what are the main forms of factoring? **[8 marks]**

c) Define Bank overdraft and what are its main advantages as a source of short term finance. **[7 marks]**

FORMULA SHEET

1 $$\text{WACC} = \frac{\text{E}}{\text{D}+\text{E}}(\text{r}_\text{e}) + \frac{\text{D}}{\text{D}+\text{E}}(\text{r}_\text{d})(1-\text{t})$$

Where:
E = market value of equity
D = market value of debt
r_e = cost of equity
r_d = cost of debt
t = corporate tax rate

2 $$K_e = \frac{D_1}{P_0} + g$$

3 $$R_a = R_f + \beta(R_m - R_f)$$

Where:
R_f = Risk free rate
B = Beta of the security
R_m = Expected Market Return

$$\text{Bond Price} = C * \frac{\left[1 - \left[\frac{1}{(1+i)^n}\right]\right]}{i} + \frac{M}{(1+i)^n}$$

$$K_d \text{ (before tax)} = \frac{C + \left(\frac{D-P}{n}\right)}{\frac{(D+P)}{2}}$$

where, C = Annual Interest Payments
D = Par Value of Debentures
n = Number of years to maturity
P = Net Proceeds

$$K_d = \frac{C}{P}(1-T)$$ where, K_d = Cost of debt,
C = Annual Interest Payments,
P = Net Proceeds,
T = Applicable tax rate.

$$\text{Bond Price} = \frac{C}{F} * \frac{\left[1 - \left[\frac{1}{(1+\frac{i}{F})^{n*F}}\right]\right]}{\frac{i}{F}} + \frac{M}{(1+\frac{i}{F})^{n*F}}$$

$$FV_a = PMT\left[\frac{(1+r)^n - 1}{r}\right]$$

$$FV_{ad} = PMT\left[\frac{(1+r)^n - 1}{r}\right](1+r)$$

$$P_0 = \frac{D}{r}$$

$P_0 = Price$

$D = Dividend$

$r = Discount\ Rate$

$$P_0 = \frac{D_1}{K_e - g}$$

$D_1 = Expected\ Dividend\ for\ Year\ 1$

$g = Growth\ Rate$

$K_e = Discount\ rate$

$$P_0 = \frac{D_0(1+g)}{R-g} = \frac{D_1}{R-g}$$

Cost of Redeemable Debt

- **Shortcut Method (After Tax)**

$$K_d = \frac{I(1-t) + (RV - SV)/n}{(RV + SV)/2}$$

2

Kd : Cost of Debt

I : Annual Interest payment

SV : Sale value or Sale proceeds

RV : Redeemable Value

n : Term of Debt

$$Zero\,Coupon\,Bond\,Value = \frac{F}{(1+r)^t}$$

$F = face\ value\ of\ bond$
$r = rate\ or\ yield$
$t = time\ to\ maturity$

$$P_0 = \sum_{t=1}^{\infty} \frac{D_t}{(1+R)^t}$$

Irredeemable Preference Shares $K_p = D/NP$

Redeemable Preference Shares $K_p = \frac{D + 1/n\ (P-NP)}{½(P+NP)}$