NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE DEPARTMENT OF FINANCE BACHELOR OF COMMERCE HONOURS DEGREE IN<br>Accounting; Finance; Fiscal Studies; Banking<br>Insurance \& Risk Management; Actuarial Science<br>Marketing; Management<br>PART II - $2^{\text {ND }}$ SEMESTER FINAL EXAMINATION - AUGUST 2009<br>CORPORATE FINANCE II [CFI 2201]<br>TIME ALLOWED: 3 HOURS

## INSTRUCTIONS

1. This paper consists of six [6] questions.
2. Attempt any four [4] questions.
3. Each question carries 25 marks.
4. Show all workings.

## QUESTION ONE

a) Define the terms operating lease and financial lease.
b) Why would a company lease an asset rather than purchase it outright?
c) Define a call option and a put option.
d) ABC buys a 30-day American Call option on the $1^{\text {st }}$ of September 2009 on an Old Mutual share that was trading at $\$ 150$. The premium payable is $3 \%$ of the going market price. The strike price is $\$ 168$. On 27 September 2009, the price of the share is $\$ 175$ and no further price movements are expected.

## Required

(i) What action would ABC take?
(ii) Calculate the profits or losses to ABC given the action taken on (i).(2)
(iii) Draw the pay-off diagram.
e) Suppose a client buys 1000 PPC shares on margin. The shares are bought at a price of $\$ 800$ each and initial margin requirement is $70 \%$. If maintenance margin is $50 \%$ and the share price declines to $\$ 400$, how much will the client be required to deposit into his account to normalize his financial position?
f) Company XYZ ltd recently paid a dividend of 600 cents. The company has a return on equity of $20 \%$, and an earnings retention rate of $40 \%$. The required rate of return by common stockholders is $15 \%$.

## Required

(i) Calculate the expected dividend growth rate.
(ii) Calculate the expected/intrinsic value of the share.

## QUESTION TWO.

a) Surrogate Enterprises needs to undertake a $\$ 100$ million expansion project. The three possible sources of finance are retained earnings, debt, and new stock issue. The policy at Surrogate Enterprises is to maintain debt to equity ratio at $45 \%$. The company already has a borrowing of $\$ 10$ million and the current debt to equity ratio is $40 \%$.

Surrogate Enterprises recently paid a dividend of \$6 and dividends are expected to grow at a constant rate of $7 \%$ p.a. indefinitely. The current market price of the share for Surrogate Enterprises is $\$ 40$. The required yield on bonds of similar risk as bonds issued by Surrogate is $10 \%$.

## Required

(i) Given that the company has already set aside $\$ 10 \mathrm{~m}$ in retained earnings, calculate the amount that would be raised through issuing bonds and amount raised through issuing common stock.
(ii) Calculate cost of equity
(i) If Surrogate Enterprises pays corporate tax of 35\%, calculate the after tax cost of debt
(ii) Calculate WACC for Surrogate Enterprises.
b) Explain capital structure and its impact on the value of the firm with reference to;
(i) $\quad \mathrm{M}-\mathrm{M}$ propositions in a world without taxes.
(ii) Trade-off theory.
c ) PLC Ltd issues a 15 year semi-annual coupon bond with a face value of $\$ 1000$, and a $10 \%$ annual coupon rate. The required yield is $12 \%$.
(i) Compute the expected/intrinsic bond price.
(ii) Briefly discuss the three risks associated with investing in bonds.
(a) State three financial distress costs that arise due to increased debt in the capital structure of a firm.

## QUESTION THREE

[25 Marks]
a) Discuss four factors that affect a firm's dividend policy.
b) Discuss dividend policy with reference to:
(i) The Residual Theory
(ii) The Tax Differential Theory
(iii) The Clientele Theory
c ) ABC Ltd decides to pay a common stock dividend in the form of shares. Its balance sheet as at 31 December 2008 is as follows:

## Balance Sheet of ABC Ltd as at 31 December 2008 <br> '\$'

Preferred Stock
600,000
Common stock
Share Premium
Retained Earnings
800,000 --- - (100 000 shares at $\$ 8$ par value)
1,200,000
1,400,000
4,000,000
If a common stock dividend of $10 \%$ is declared at a time when the share is trading at \$30;
(i) Calculate the number of shares issued as dividend.
(ii) Show the balance sheet of ABC after the stock dividend payment
(iii) Explain the rationale behind stock splits.

## QUESTION FOUR

[25 Marks]
a) Distinguish between money markets and capital markets.
b) Explain the economic importance of a secondary market for financial assets.
c) With particular reference to Zimbabwe, state and explain two reasons why a central bank would issue Treasury bills.
d) Define the following terms:

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\begin{array}{ll}
\text { (i) } & \text { Initial margin }  \tag{2}\\
\text { (ii) } & \text { Maintenance margin }
\end{array}
$$

(iii) Variation margin
e) Briefly discuss the following;
(i) Zero coupon bonds
(ii) Revenue Bonds.
f) Given that the modified duration of a bond is 2.78 years and that yields are expected to decline from the current $9 \%$ to $8.5 \%$, calculate the expected percentage change in the price of the bond.

QUESTION FIVE
[25 Marks]
a) Define operating leverage and financial leverage.
b) Given that a $40 \%$ increase in sales of XYZ Ltd results in an $80 \%$ increase in EBIT, calculate the implied Degree of Operating Leverage [DOL].
c) Discuss the impact of operating and financial leverage on the business and financial risk profile of a firm.
d) Define the following terms
(i) Cash conversion cycle
(ii) Inventory conversion period
(iii)Payables Deferral Period
e) Discuss three strategies that can be employed to reduce the Cash Conversion Cycle.

## QUESTION SIX

[25 Marks]
(6)
a) With reference to Zimbabwe, state and explain three reasons why companies would merge.
b) With the aid of relevant examples, discuss the three types of mergers.
c) Management of RTG, a listed company on the Zimbabwe Stock Exchange observes that there are a significant number of their shares being bought by an unknown investor. It later emerges that the buyer of these shares is linked to Afrisun Ltd, a major competitor of RTG in the tourism sector. In his statement accompanying the 2008 financial statements, Afrisun Ltd Chief Executive Officer, Mr. S Munyeza indicated that the company intends to expand presence in the local market ahead of the 2010 Soccer World Cup.
(i) Define the term 'hostile takeover'.
(ii) Discuss three strategies that RTG management could employ to fight a possible takeover by Afrisun Ltd.

END OF PAPER

