# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE <br> DEPARTMENT OF BUSINESS MANAGEMENT <br> MANAGEMENT DEVELOPMENT PROGRAMME <br> FEBRUARY 2010 EXAMINATIONS <br> FINANCIAL MANAGEMENT - MDP 1003 <br> TIME ALLOWED: 3 HOURS 

## INSTRUCTIONS TO CANDIDATES

Answer all questions in Section A and any one question in Section B

## INFORMATION TO CANDIDATES

i) Questions can be answered in any order.
ii) All questions in SECTION B carry 24 marks each.
iii) This paper contains Six questions.

## SECTION A

## QUESTION 1

A debenture has a face value of $\$ 1000$, a coupon rate of $25 \%$ per annum, 15 years to maturity and a yield $20 \%$ per annum. What is the value of the debenture? Is the debenture selling at a premium, discount or at par?
a) A firm is about to issue preference shares with a par value of $\$ 1000$ and a coupon dividend rate of $20 \%$ per annum. If the required rate of return for such preference shares on the market is $25 \%$ per annum, how much is the value of the preference shares?
[2 Marks]
b) A company has just paid a dividend of 295 cents. The dividend growth rate has been maintained at $8 \%$ per annum. The required rate of return on the stock is $15 \%$. What is the value of the stock?
[4 Marks]
d) Valuation is being done for $\mathrm{C}(\mathrm{Pvt})(\mathrm{Ltd})$ an unlisted firm. An extract of information from the firm's profit and loss account and balance sheet shows the following:

Net income
Dividends paid
Number of shares issued
Price/Earnings (P/E) ratio
$\$ 12500000$
\$ 3000000
20000000
2.5

Calculate the following for $\mathrm{C}(\mathrm{Pvt}) \mathrm{Ltd}$ :
i) Earnings per share, [2 Marks]
ii) Price per share,
[2 Marks]
iii) Dividend per share.
[2 Marks]
iv) Value of the firm,
[2 Marks]
v) Value of the firm if the P/E ratio was 4 instead of 2.5
[2 Marks]

## QUESTION 2

a) What is the yield on the preference shares if they are trading at $\$ 280$, and the dividend payable yearly is 80 cents?
[2 Marks]
b) If a firm has a beta of 1.5 the market rate of return is $25 \%$, and the risk free rate is $15 \%$. What is the cost of equity?
[3 Marks]
c) A firm considers its long-term objective to be financed by $30 \%$ debt, $10 \%$ preference shares, and $60 \%$ equity. The firm has an after tax cost of debt of $10 \%$, a cost of preference shares of $22 \%$ and a cost of equity of $25 \%$. Calculate the Weighted Average Cost of Capital (WACC).
[5 Marks]

## QUESTION 3

A Ltd and B Ltd are similar companies in the same industry and enjoying the same market. The following information relates to these two companies:

|  | A Ltd | B Ltd |
| :--- | :---: | :---: |
|  | $\$$ | $\$$ |
| Ordinary share capital (\$1 shares) | 10000 | 20000 |
| $10 \%$ Debentures | $\underline{10000}$ | $\underline{-}$ |
| Capital Employed (CE) | $\underline{20000}$ | $\underline{20000}$ |

For both companies, Earnings before interest and tax (EBIT) is 30\% of Capital employed and tax rate is $30 \%$. Further, both companies distribute as dividends all their net earnings

## Required:

a) For each company, calculate the following:
i) Earnings before interest and tax (EBIT)
[2 Marks]
ii) Earnings after tax (EAT)
[4 Marks]
iii) Earnings per share (EPS)
[2 Marks]
iv) Dividend per share (DPS)
[2 Marks]
b) Assuming you hold 1000 shares in each of the companies, how much dividend would you receive from each company? What action would you take if the current earnings by the two companies are likely to be maintained in the foreseeable future.
Give reasons for your proposed action.
[6 Marks]

## QUESTION 4

An investor is considering the following two investments A and B :

| Probability | Return on A | Return on B |
| :---: | :---: | :---: |
| 0.25 | $15 \%$ | $18 \%$ |
| 0.15 | 24 | 20 |
| 0.30 | 21 | 12 |
| 0.20 | 5 | 22 |
| 0.10 | 12 | 8 |

## Required:

a) For each investment, calculate the following:
i) Expected return
[2 Marks]
ii) Variance
iii) Standard deviation
iv) Coefficient of variation
v) Covariance
vi) Correlation coefficient
b) Which investment is preferable? Give reasons for your answer.
c) Assuming you create portfolio AB made up of $40 \%$ of A and $60 \%$ of B, what would be the expected return and standard deviation of this portfolio?

## SECTION B

## Answer one question in this section.

## QUESTION 5

(a) What is the role of a financial manager in an organization?
[6 Marks]
(b) Explain the agency problem in financial management.
(c) How best can shareholders deal with problems of agency relationships?
[9 Marks]

## QUESTION 6

Discuss each of the following dividend policy theories and explain their applicability in Zimbabwe:

| (a) | The Dividend Relevance Theory, | [8 Marks] |
| :--- | :--- | :--- |
| (b) | The Dividend Irrelevance Theory, | [8 Marks] |
| (c) | The Residual Theory of Dividends. | [8 Marks] |

## END OF EXAMINATION

