

WOMEN'S UNIVERSITY IN AFRICA



Addressing gender disparity and fostering equity in University Education

FACULTY OF MANAGEMENT AND ENTREPRENEURIAL SCIENCES

MASTERS DEGREE IN BUSINESS ADMINISTRATION

MAIN PAPER

MBA 214: FINANCIAL MANAGEMENT

INTAKE 21: SECOND YEAR FIRST SEMESTER

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

Answer **Question 1** and any other **two** questions.

Question 1

Don-Ash Mining Corporation has just paid a dividend of 175 cents per share. Dividends and earnings have been growing at 38% per year for the past two years. A corporate financier from Imara Asset management has predicted the following growth rates in dividends and earnings:

32% per year for the next five years

25% per year for the three years after that

10% per year in perpetuity

The required rate of return on the company's equity is 21% for the next eight years and it will change to 14% in perpetuity thereafter.

On another note, Don-Ash Mining Corporation owes LKAT Corporation \$20 000 due in six months and \$6 000 due in 11 months. Don-Ash Mining Corporation offers to pay \$10 000 immediately if it can pay the balance in two year. LKAT Corporation agrees, on condition that they use a simple interest rate of 18% per annum. They also agree that for settlement purposes the \$10 000 paid now will also be subject to the same rate.

Required

- a) Determine the intrinsic value of Don-Ash Mining Corporation's shares?
[20]
- b) How much will Don-Ash Mining Corporation have to pay at the end of the two years?
[20]

Question 2

ABC Ltd has a 5-year acceptable maximum payback period. The firm is considering the purchase of a machine and must choose between two alternative ones. The first machinery requires an initial investment of \$150 000 and generates annual after tax cash inflows of \$40 000 for each of the next 7 years. The second machinery requires an initial investment of \$240 000 and provides an annual after tax cash inflows of \$50 000 for 10 years. The cost of capital for both investments is 10%. Determine the following for each machine and comment on the acceptability of the machines, assuming they are independent projects

- a) Payback period; [4]
- b) Discounted payback period; [4]
- c) Net Present Value; [4]
- d) Internal Rate of Return; and [6]
- e) Profitability Index [2]

Question 3

- a) Suppose you deposit \$10000 today in an account that pays simple interest of 20% per annum. How much will you have at the end of 3 years? [4]
- b) LK owes AT \$20 000 due in six months and \$6 000 due in a year. LK offers to pay \$10 000 immediately if he can pay the balance in two year. AT agrees, on condition that they use a simple interest rate of 18% per annum. They also agree that for settlement purposes the \$10 000 paid now will also be subject to the same rate. How much will LK have to pay at the end of the two years? [8]
- c) A bank's simple discount rate is 18%. If one signs a promissory note to pay \$5 000 in six months' time, how much would one receive from the bank now? What is the equivalent simple interest rate? [4]

- d) Find the compounded amount on \$3 000 invested for ten years at 8.5% per annum compounded annually? [4]

Question 4

WaWal Pharmacies, has the following capital structures:

400 000 ordinary shares at 5 dollars each
200 000 10% preference share at 4 dollars each
Capital Reserves \$350 000
Revenue Reserves \$200 000
Retained Earnings \$290 000
350 000 8% debentures at \$12 each

Additional Information

- a) Ordinary share dividend is expected to grow by 15% p.a constantly and the current price of \$110 and a dividend of \$30 have just been issued.
b) Preference shares have a cost of 10%.
c) Debenture attracts a cost of 12%.
d) Taxation is at 35%.

Required:

Calculate the weighted average cost of capital of Walgreen Pharmacies. [20]

Question 5

- a) Tariro Enterprises owned by an indigenous entrepreneur borrowed \$80 000 from a local bank. The interest rate was 25 % p.a. compounded semi-annually and the company will have to pay back at the end of every six months for three years.

Required:

- (i) Determine the size of each instalment. [5]
(ii) Draw up an amortization table splitting interest payment from principal payments. [5]

- b) Dr. Tough decides to save for her daughter's higher education and, every year, from the child's first birthday onwards, puts away \$1 200. If she receives 11% interest annually, what will the amount be after her daughter's 18th birthday? [4]
- c) Explore the differences between the dividend irrelevance theory, bird in the hand theory and the tax preference theory [6]

Question 6

- a) Discuss the three main goals of corporate finance and relate them to their importance. [5]
- b) Draw up an amortization table for a loan of \$4 000 for three years at 12% per annum compounded half-yearly and repayable in six half-yearly payments. How much interest will you pay over the life of the loan? [15]

END

LIST OF FORMULAS

1. $S = P(1 + rt)$

2. $S (FV) = P (1+i)^n$

3. $DV = S (1-dt)$ or $(S-D)$

4. $FVIFA_{n,i\%} = \frac{(1+i)^n - 1}{i}$

5. $FV_{OD} = \left[\frac{(1+i)^n - 1}{i} \right] \times R$

6 $PVIFA_{OD} = \frac{(1+i)^n - 1}{i(1+i)^n}$

7 $PV_{OD} = \left[\frac{(1+i)^n - 1}{i(1+i)^n} \right] \times R$

8 $IRR = A + [(a / a + b)][(B - A)]$

9. $K_e = \frac{D_1}{P_0} + g$

10. $K_d = \frac{INT(1 - T)}{P_0}$

11. $WACC = W_d K_d (1-T) + W_{ps} K_{ps} + W_e K_e$

12. $Vb = INT (PVIFA_{kd,n}) + M (PVIF_{kd,n})$

13. $P_0 = \frac{D_1}{(1+k_e)} + \frac{D_2}{(1+k_e)^2} + \frac{D_3}{(1+k_e)^3} + \dots + \frac{D_n}{(1+k_e)^n} + \frac{TVn}{(1+k_e)^n}$