

# WOMEN'S UNIVERSITY IN AFRICA



*Addressing gender disparity and fostering equity in University Education*

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**FACULTY OF MANAGEMENT AND ENTREPRENEURIAL SCIENCES**

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**BACHELOR OF ACCOUNTING SCIENCE HONOURS DEGREE**

**MAIN PAPER**

**BMF222: ADVANCED CORPORATE FINANCE**

**INTAKE 9: FOURTH YEAR FIRST SEMESTER**

**TIME: 2 HOURS**

**INSTRUCTIONS TO CANDIDATE**

Answer any **three** questions.

### Question 1

- a) State the criterion for accepting or rejecting mutual exclusive project under each rule
- (i) Discounted payback period [2]
  - (ii) Net present value [2]
  - (iii) Internal rate of return [2]
  - (iv) Profitability index [2]
- b) Consider the following cash flows of two mutual exclusively projects for Rubber Company.

Assume the discount rate is 10 %

Year	Project A	Project B
0	1 000 000	500 000
1	600 000	300 000
2	400 000	500 00
3	1 000 000	100 000

Which project should be taken based on

- (i) Net Present Value [6]
- (ii) Internal rate of return [7]
- (iii) Profitability index [4]

### Question 2

- (i) If the stated annual rate of interest is 12% is compounded quarterly, what is the effective annual rate [4]
- (ii) Distinguish among the shapes of the Rising yield curve and the Humped yield curve [4]
- (iii) Micro- hard has issued a bond with the following Par -\$1 000,time to Maturity 20 years,
  - a. Coupon rate -8%. Calculate the price of this bond if the YTM is 8 %,10 % and 6% [13]

- (iv) The next dividend payment by Rock Ltd will be \$3.10 per share .the dividend are anticipated to maintain a 5 % growth rate forever. if Rock Ltd stock currently sells for \$48 per share , what is the required return ( $K_e$ ) [4]

**Question 3**

- a) A famous economist announced in the wall street journal his findings that recessions are over and the economy is again entering an expansion. With the knowledge of efficiency market hypothesis can you profit from investing in the stock market after you read this announcement [10]
- b) State four assumptions of the capital asset pricing model (CAPM) [4]
- c) The risk free rate is 8% and the expected return on the market portfolio is 16% .A firm consider a project that is expected to have a beta of 1.3  
What is the expected rate on the project? [3]
- d) Calculate the beta of the portfolio considering of the following securities' [5]

<b>SECURITY</b>	<b><math>X_i</math></b>	<b>Beta</b>
A	0.25	1.5
B	0.25	1.0
C	0.25	1.2
D	0.25	0.3

- e) With use of examples, distinguish between Nominal and Real Interest Rate. [3]

#### Question 4

- a) Discuss private placement as a method of issuing out shares [5]
- b) The returns of CeeTech Company are expected to follow the economy closely while Engine company returns are not. The returns predictions are as follows

State of the economy	Ceetech returns	Engine ltd returns	Probability
Depression	-20	5	0.25
Recession	10	20	0.25
Normal	30	-12	0.25
Boom	50	9	0.25

Calculate;

- (i) Expected return of each company [6]
- (ii) The standard deviation of each company [6]
- (iii) The covariance [4]
- (iv) The correlation [4]

#### Question 5

Project sector	Initial Investment (RTGS \$million)	Return	Standard Deviation	Correlation coefficient with market
Mining	30	7%	10%	0.1
Agriculture	40	13%	5%	1.0
Tourism	60	12%	4%	0.8

The market return is estimated at 14% while the market standard deviation is estimated at 5% and the risk free return is estimated at 5.5%.

**Required:**

- a) Using the information above calculate the beta for each project. [6]
- b) Using CAPM, show whether each project returns justifies the investment. [10]
- c) Your broker offers to sell you some shares of Rock & Co. common stock that paid a dividend of \$2 yesterday. You expect the dividend to grow at the rate of 5 percent per year for the next 3 years, and, if you buy the stock, you plan to hold it for 3 years and then sell it.
- i) Calculate the expected dividend for each of the next 3 years. [4]
- ii) Given that the appropriate discount rate is 12 percent and that the first of these dividend payments will occur 1 year from now, find the present value of the dividend stream [5]

**Question 6**

- a) The finance manager is proposing debt finance to equity financing to fund organization activities. You have been approached by the company management to give your analysis and advise them accordingly. [12]
- b) Examine the Dividend irrelevance theory [6]
- c) Explore the advantages and disadvantages of the firm for going public for funding. [7]

**END**