



The Co-operative University of Kenya

END OF SEMESTER EXAMINATION DECEMBER-2019

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN FINANCE

UNIT CODE: CMFI

UNIT TITLE: CORPORATE FINANCE

DATE: DECEMBER, 2019

TIME:

INSTRUCTIONS:

- Answer question **ONE (compulsory)** and any other **TWO** questions

QUESTION ONE

- (a) Explain the following theories as used in the debit financing by a firm
- i) Modiglian and Miller (2 marks)
 - ii) Trade off theory (2 marks)
 - iii) Pecking order theory (2 marks)
 - iv) Bird in hand theory (2 marks)
- (b) In making investment decisions cashflow are considered to be more relevant than accounting profits, briefly explain why this is the case (4 marks)
- (c) Mapato Ltd. Is a company involved in the processing of cooking oil. The management is considering whether to replace an existing cooler with a new one. The old cooler is fully depressed and has no salvage value. If not replaced, the company will continue to incur shs 1.8 million as annual operating expenses and an additional shs 500,000 in repair costs per annual over the next 15 years. The new cooler costs shs 3,150,000. Its annual operating expenses and repair costs are shs 1.3 million and shs 350,000 respectively over its estimated economic life, of 15 years, Uit is expected to be worthless after the expiry of this period. The cost of capital is 10% and the company depreciates its assets using the straight line basis assume a compound tax rate of 30%

Required

- i) Compound the incremental net annual cashflow of the old cooler is replaced (10 marks)
- ii) Using the net present value (NPV) method, advice the management on whether or not to replace the older cooler (8 marks)

QUESTION TWO

- (a) Project A has the following cashflows over its useful life of 3 years. The market value (abandonment value) has also been given

	Cashflow	Abandonment Value
Y ₀	4800	3800
Y ₁	2000	3000
Y ₂	1875	1900
Y ₃	1750	0

Required

- (b) Determine when to abandon the project assuming a discount rate of 10% (8 marks)
- (c) Distinguish between treasury bills and treasury bonds (6 marks)
- (d) Dunlop Ltd share has a nominal value of shs 160. The company pays 10% of the nominated value of the share as divided for the year. The current market price of the share is shs 320 with 15% earnings yield

Required:

- i) Earnings per share (2 marks)
- ii) Dividend cover (2 marks)
- iii) Price earnings ratio (2 marks)

QUESTION THREE

(a) An investor has portfolio consisting of shares of FOUR different companies, listed in the stock exchange. The information relates to companies portfolio market return %

Company Factor	Market	No of return % of shares		MPS	Beta
A	10	20,000	50	1.5	
B	12	30,000	60	1.2	
C	13	40,000	30	0.8	
D	16	10,000	10	1.4	

Risk free rate is 12%. The market and probability distribution

Required:

- i) Determine the risk of the portfolio to the market portfolio (8 marks)
- ii) Determine the expected return from the market (RM) (2 marks)
- iii) Determine the security market line (6 marks)
- iv) Outline the assumptions underlying the capital asset pricing model (CAPM) (4 marks)

QUESTION FOUR

Mazembe Ltd has cost of equity of 10% currently, the company has 250,000 shares which are quoted at the securities exchange at shs 12 per share. The company's earnings per share is shs 10 and it intends to maintain a dividend pay-out ratio of 50% at the end of the current financial year.

The expected net income for the current year is shs 3 million and the available investment proposals are estimated to cost shs 6 million

Required:

Using the Modigliani and Miller (MM) model, show that the payment of dividend doesn't affect the value of a firm

- (a) Value of a firm when dividend is paid (10 marks)
- (b) Value of a firm when dividend is not paid (10 marks)

QUESTION FIVE

The following is the capital structure of XYZ Ltd as 31/12/18

Ordinary share capital shs 10	400,000
Par value	200,000
Retained earnings	100,000
10% preference shares @shs 20	
12% debentures shs 100 per value	200,000

Additional information

- (a) Corporate tax rate is 30%
- (b) Preference shares were issued 10 years ago and are still selling at par value MPS per value
- (c) The debenture has a 10 years maturity period. It is currently selling at shs 10 in the market

- (d) Currently the firm has been paying dividend per share of shs 5 the D.P.S is expected to grow at 5% p.a in the future. The current MPS is sh 40

Required:

- i) Determine the specific cost firm (of each source of fund) (6 marks)
- ii) Weighted average cost of capital (4 marks)