

# The Co-operative University of Kenya END OF SEMESTER EXAMINATIONS DECEMBER-2019

# EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE (YR IV SEM II)

# **UNIT CODE: HBF 2302**

## UNIT TITLE: ADVANCED FINANCIAL MANAGEMENT

DATE: 9th DECEMBER 2019

TIME: <mark>9:00 AM – 11:00 AM</mark>

#### **INSTRUCTIONS:**

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

#### **QUESTION ONE**

Vear 1

- (a) Explain how sensitivity and scenario analysis can be used to asses the stand-alone risk of a capital project (6 marks)
- (b) Discuss the efficient frontier with respect to investments in portfolio theory (6 marks)
- (c) Highlight any **FIVE** the factors that determine the optimal working capital in a firm (5 marks)
- (d) The information below relates to cashflows for two years for project-suswa, an independent project of the famous SGR(Sugoi Gambling Reinvented). The projects initial cash outlay is Sh 100,000 with a cost of capital of 12%.

rear 1		rear 2	
Cashflow	Probability	Cashflow	Probability
60,000	0.3	50,000	0.3
		60,000	0.5
		70,000	0.2
80,000	0.4	60,000	0.3
		80,000	0.5
		100,000	0.2
100,000	0.3	80,000	0.3
		100,000	0.5
		120,000	0.2

#### **Required:**Using decision tree analysis determine:

i).	The projects expected monetary value (EMV)	(7 marks)
ii).	The projects NPV	(6 marks)

#### **QUESTION TWO**

(a) Explain the costs of financial distress and their effect on the capital structure. (3 marks)

- (b) Briefly explain how inflation affects capital budgeting analysis (4 marks)
- (c) Highlight any **FIVE** principles of capital Budgeting

(5 marks)

(d) Mr.Kajohnie thefinancialmanagerof Friends-With-BenefitLtd isconsideringinvestinginariskyprojectwhich would be added an an an an activities D, E and F have the following characteristics with respect to expected return, standard deviation and correlation coefficients.

Security	Expected Return	<b>Standard Deviation</b>	Correlation	on Coefficien	ts
			$\mathbf{D}$	${f E}$	$\mathbf{F}$
D	0.08	0.02	0.4	0.6	
E	0.15	0.16	0.4		0.8
F	0.12	0.08	0.6	0.8	

# Required:

Compute the expected rate of return and standard deviation of a portfolio comprised of equal investment in each security. (8 marks)

(a)

#### **QUESTION THREE**

- i). Define and differentiate Optimal capital structure and Target Capital structure(2 marks)
- ii). Discuss the implications of MM's propositions with no taxes, MM's Proposition with Taxes and the static trade-off theory on managerial decision making. (6 marks)
- iii). Explain the Perking order theory with respect to capital structure (4 marks)
- iv). Company Beta is considering investing in a project which has a three-year life. The project would involve an initial investment of Sh.20 million. The finance manager has come up with expected probabilities for various possible economic conditions as follows:

Year 0	Economic Conditions	Sh.'000' Net cash flows (20,000)	Probability
1	High growth	10,000	0.2
	Average growth	6,000	0.7
	No growth	2,000	0.1
2	High growth	12,000	0.3
	Average growth	8,000	0.5
	No growth	4,000	0.2
3	High growth Average growth No growth	16,000 12,000 6,000	0.4 0.3 0.3

**Required:** Assuming a discount rate of 12%, advise whether company Beta invest in the project (8 marks)

#### **QUESTION FOUR**

(a) Discuss the efficient frontier with respect to investments in portfolio theory (4 marks)

- (b) Explain any THREE dividend policies that firms use (6 marks)
- (c) Explain the any FOUR determinants of the choice between paying cash dividends and repurchasing shares (4 marks)
- (d) Discuss any TWO dividend theories and explain their relevance in the modern-day firms. (6 marks)

## **QUESTION FIVE**

Evans Industries wishes to select the best of three possible mutually exclusive machines, each of which is expected to satisfy the firm's ongoing need for additional aluminum-extrusion capacity. The three machines—A, B, and C—are equally risky. The firm plans to use a 12% cost of capital to evaluate each of them. The initial investment and annual cash inflows over the life of each machine are shown in the following table.

Initial investment (CF <sub>0</sub> )	Machine A 92,000	<b>Machine B</b> 65,000	<b>Machine C</b> 100,500
Year (t)	Cashflows (CF <sub>t</sub> )		
1	12,000	10,000	30,000
2	12,000	20,000	30,000
3	12,000	30,000	30,000
4	12,000	40,000	30,000
5	12,000		30,000
6	12,000		

#### Required:

- i). Based on the net present value advise the firm on the feasibility of the projects(6 marks)
- ii). Calculate the Modified Internal rate of Return for each of the projects (3 marks)
- iii). If the firm had a total of Sh 170,000 advise the firm on which projects to undertake (3 marks)
- iv). Evaluate these projects using both the least common multiple and the Equivalent annual annuity approaches and advise a hypothetical investor on which machine to choose (8 marks)