



# The Co-operative University of Kenya

## END OF SEMESTER EXAMINATION DECEMBER-2019

### EXAMINATION FOR THE DEGREE OF BACHELOR OF CO-OPERATIVE BUSINESS

#### UNIT CODE: HBF 2306

#### UNIT TITLE: PROJECT APPRAISAL

**DATE: DECEMBER, 2019**

**TIME:**

#### **INSTRUCTIONS:**

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

#### **QUESTION ONE**

- (a) ABC limited wishes to expand its output by purchasing a new machine worth 1700,000 and installation costs are estimated at 200,000/=. In the 4<sup>th</sup> year, this machine will call for an overhaul to cost 800,000/=. Its expected inflows are:

	Shs.
Year 1	400,000
Year 2	500,000
Year 3	200,000
Year 4	350,000,
Year 5	600,000,
Year 6	800,000,

This company can raise finance to purchase machine at 12% interest rate.

#### **Required:**

- Compute NPV and PI and advise management accordingly. (10 marks)
- (b) Discuss any Five factors that can affect the cost of acquiring capital for an organization (10 marks)
- (c) Other than benefits to be realized or costs saved in lease or buy decisions, discuss any other factors to be put in consideration before a decision is made. (10 marks)

#### **QUESTION TWO**

A summary of the profit and loss reported in each of 3 product lines B, C, and D is as follows:

	Product B	Product C	Product D
	Shs.000	Shs.000	Shs.000
Sales revenue	60	40	40
Less variable cost	40	30	42
Contribution	20	10	(2)
Less fixed cost	15	12	10
Net profit (loss)	5	2	(12)

#### **Required:**

- (a) Comment on the financial situation as presented in the above summary
- (b) Comment on a decision to discontinue product C where
- a. 60% of the fixed costs charged to it relate to advertising of product C and are avoidable if discontinued OR
  - b. All of the fixed costs charged to product C are avoidable if discontinued
- (c) Discuss whether product D should be discontinued if
- 90% of the fixed costs charged to it are company costs arbitrarily apportioned to it Or
  - Eliminating of its variable cost would result in an increase in material cost for products B and C because of lost discounts which would have the effect of increasing their variable costs by 5% OR
  - Products B and D are complementary products whose sales demand is directly related to that of each other ( 20 marks)

### QUESTION THREE

- (a) XYZ Ltd wants to raise new capital to finance a new project. The firm will issue 200,000 ordinary shares (Sh.10 par value) at Sh.16 with Sh.1 floatation costs per share, 75,000 12% preference shares (Sh.20 par value) at Sh.18 with sh.150,000 total floatation costs, 50,000 18% debentures (sh.100 par) at Sh.80 and raised a Sh.5,000,000 18% loan paying total floatation costs of Sh.200,000. Assume 30% corporate tax rate. The company paid 28% ordinary dividends which is expected to grow at 4% p.a.

#### Required:

- i. Determine the total capital to be raised under the proposal
  - ii. Compute the marginal cost of capital (15 marks)
- (b) Discuss any five assumptions of the capital asset pricing model (5 marks)

### QUESTION FOUR

- (a) Odongo ltd. is considering three possible capital projects for next year. Each project has a 1 year life, and project returns depend on next year's state of the economy. The estimated rates of return are shown below.

STATE OF THE ECONOMY	PROBABILITY OF OCCURRENCE	RATE OF RETURN %		
		A	B	C
Recession	0.35	10	9	14
Average	0.45	14	13	12
BOOM	0.20	16	18	10

#### Required:

- i. Find each project expected rate of return and standard deviation.
  - ii. Compute the correlation coefficient between
    - i. A and B
    - ii. A and C
    - iii. B and C
  - iii. Compute the standard deviation of the portfolio. (15 marks)
- (b) Discuss three ways of classifying capital investments (5 marks)

## QUESTION FIVE

- (a) Provide detailed classification of sources of funds for project managers (4 marks)
- b) Explain the basic data required to undertake cost –benefit analysis during project appraisals (6 marks)
- c) justify the importance of undertaking feasibility study under projects funded through public /private initiatives (6marks)
- d) Explain types of classification for sources of capital in project financing. (4 marks)