

Jaramogi Oginga Odinga University of Science and Technology

UNIVERSITY EXAMINATION FOR BACHELOR OF SCIENCE IN CONSTRUCTION MANAGENT

MAIN CAMPUS

UNIT CODE: TCM 3315

UNIT NAME: CONSTRUCTION ECONOMICS STREAM:

EXAM VENUE:

EXAM DATE: DURATION: 2 HRS

Instructions

- 1. The paper contains Five (5) Questions
- 2. Answer three Questions
- 3. Question ONE is compulsory with 30 Marks
- 4. Answer ANY OTHER TWO Questions of 20 Marks each

QUESTION ONE

Construction industry is one of the major drivers of Kenya's economic growth and is key in the realization of Kenya's 'Vision 2030'. However, this industry is currently facing challenges with emergence of unqualified personnel in the industry that has led to collapse of several buildings. National Construction Authority (NCA) as a regulator has come up with stringent rules to control the industry.

- a) Briefly explain some of the reasons that have contributed to collapse of buildings in the recent past (5 Marks)
- b) What are some of the contributions of construction industry to Kenya's economy (10 Marks)
- c) The B-Products Plc 's profit function is given by the following equation $Y = 0.75x +0.0042x^2 -0.0000x^3$ where y = Profit and x = quantity produced
 - (i) State the Maximization and Minimization rules (3 Marks)
 - (ii) Find the number of units that B –Products must produce to maximise its profits firm (8 Marks)
 - (iii) Do businesses have any other objectives other than profit maximization? Explain (4 Marks)

SECTION B: Answer ANY TWO Questions

QUESTION TWO

(a) Briefly describe the following pricing strategies giving examples in each case

i.	Peak-load Pricing	(3 marks)
ii.	Limit Pricing	(3 Marks)
iii.	Loss leader Pricing	(3 marks)

(b) Explain the following concepts in economics

i.	Scarcity	(2 Marks)
ii.	Choice	(2 Marks)
iii.	Opportunity costs	(2 Marks)

(c) Differentiate between micro and macroeconomics (5 Marks)

QUESTION THREE

Most successful companies in the construction industry have invested heavily in marketing of their products in order to attract customers and improve their turnover in order to stay afloat in the market. However, one of the key components of market of products is the various stages of the product life the company is selling in the market.

(a) What are the four marketing mix variables? Name and briefly explain in each case

(8 Marks)

(b) How would the product life cycle (PLC) help the managers improve on their turnover

(10 Marks)

(c) What are some of the challenges managers would experience when using the PLC

(2 Marks)

QUESTION FOUR

- (a) The environments in which businesses operate are uncertain and therefore firms do not have influence over them. Briefly explain how these factors would affect your business (5 Marks)
- (b) As a manager, explain the measures you would take in managing such risks

(8 Marks)

- (c) Brief explain some of the possible causes of inaccessibility of finances by construction firms in Kenya (5 Marks).
- (d) Kenyan Members of Parliament recently enacted laws to regulate bank interest rates in order to increase accessibility of funds especially to the small business enterprises to promote business growth. Explain the likely impact of this move (2 Marks)

QUESTION FIVE

'Conman' was employed as Construction Manager in Mjengo Plc after his graduation. As a manager, his first assignment was to decide between two investment projects. Investments in construction projects usually require that managers carefully evaluate the projects before committing an organization to investing in projects which would otherwise yield negative returns to the company. The managers thus apply various appraisal techniques in evaluating the viability of projects before making a decision.

Required

- (a) Briefly explain features of a good project appraisal technique (6 Marks)
- (b) The management of XYZ Plc is indifferent as which of the following two projects to invest in. by a client to advise him on which of the following two projects that he wishes to undertake.

		Cash flows (Kshs'000')			
	Year	1	2	3	4
1.	Build Student Hostel	11,000	10,000	9,000	10,000
2	Build Residential Houses	10,000	10,000	10,000	10,000

If it requires Kshs 30,000,000 to start the projects, compute

- i. The payback period for each project? (2 marks)
- ii. The Net Present Value for each projects if the Discount rate is 12% (6 Marks)
- iii. Which Project would you advise the client to undertake? Give reasons (3 Marks)
 - (c) Consider a project which promises the following cash flows

Year
$$\frac{1}{2}$$
 $\frac{2}{3}$ $\frac{4}{50}$ Cash flows (kshs' 000') 20 30 40 50

If the project initial outlay is Kshs 100,000, calculate IRR (3 Marks)

Discount Rate Table

Year	1	2	3	4
PVIF (10%, n yrs) 0	.909	0.826	0.751	0.683
PVIF (12%, n yrs) 0	.892	0.797	0.712	0.636
PVIF (15%, n yrs) 0	.870	0.756	0.658	0.572

END
