

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

UNIVERSITY EXAMIMATION FOR THE DEGREE IN SCIENCE IN CONSTRUCTION MANAGEMENT

3RD YEAR 1ST SEMESTER 2022/2023 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: TCB 1309

COURSE TITLE: CONSTRUCTION ECONOMICS Dec22

EXAM VENUE:

STREAM: BSc. CONSTRUCTION MGT

DURATION: 2 HOURS

Instructions

- 1. Answer question 1 (Compulsory) and ANY other two questions
- 2. Candidates are advised not to write on question paper
- **3.** Candidates must hand in their answer booklets to the invigilator while in the examination room.

QUESTION ONE

Kenya's Vision 2030 emphasises the development of key infrastructure sectors such as roads and energy which comprises of government highest spending. Most institutions of higher learning have tailored their courses to meet the demand in line with these emerging trends. Construction economics is one of such courses.

Required

- (a) How is infrastructural development help in the achievement of this goal (12 Marks)
- (b) Different players in the market have organized themselves in the market to maximize their profits. Explain four features of a competitive market (8 Marks)
- (c) Explain how the following concepts have shaped management decision making process
 - (i) Scarcity (2 Marks)
 - (ii) Choice (2 Marks)
 - (iii) Opportunity costs (2 Marks)
- (d) Differentiate between controllable and non-controllable factors of marketing mix variables (4 marks)

QUESTION TWO

(a) Managers are agents of companies whose responsibilities, among others include decisions on project appraisal and commitment of huge sums of money for long term projects that are expected to yield positive returns.

Required:

- (i) What do you understand by the term 'Capital Budgeting'? (2 Marks)
- (ii) What are the features of a good appraisal technique (4 Marks?)
- (b) 'Conman' borrowed Kshs 20 million at an interest rate of 10% to invest in two mutually exclusive projects A and B. The projects promise the following after tax cashflows:

		Cash flows (Kshs'm')			
	Year	1	2	3	4
Project	A	6	7	7.5	7.5
Project B	6.5	6.5	6.5	8.5395	5

<u>Required</u>

- i. NPV of each project (4 Marks)
- ii. IRR of each project (6 Marks)
- iii. PBP of each project (3 Marks)
- iv. Advise of which project to undertake (1 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

QUESTION THREE

- (a) State and explain the four characteristics of construction economics (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 Product Life Cycle (PLC)? (2 Marks)

QUESTION FOUR

- (a) Enumerate and briefly and explain four sources of finance available to investors (4 Marks)
- (b) Kenya has in the recent past experienced collapse of buildings in the construction sector. This has led to lose of lives and property. Explain some of the causes and indicate how such risks can be mitigated (6 Marks)
- (c) Enumerate and explain some of the critizms associated with marketing (5 Marks)
- (d) Briefly describe the following pricing strategies giving examples in each case

(i)	Loss leader pricing	(2 ½ Marks)

(ii) Limit price (2 ¹/₂ Marks)

QUESTION FIVE

(a) Companies usually have to 'strategically' position themselves in a market, failure to which they risk being driven out. This, in most cases is always misunderstood and firms end up with strategic 'wrong choices' is pursuit of this goal.

Required

What are some of the strategic 'wrong choices' identified in Porter's Five Forces Model (P5F) that companies make in a hypercompetitive business environment? (8 Mark)

(b) Explain other objectives of the firm other than profit maximization (12 Marks)