

CHRISTIAN SERVICE UNIVERSITY COLLEGE KUMASI

CSUC SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING & FINANCE BACHELOR OF BUSINESS ADMINISTRATION

End of Second Semester Examination, 2019/2020 Academic Year

Level 400

CSBF 464: PROJECT MANAGEMENT

JUNE, 2020

[100 marks]

INSTRUCTIONS TO CANDIDATES:

- Answer TWO Questions only. Question ONE and any other question
- Write your answer on the answer sheets provided
- Your answer for EACH QUESTION should be FOUR (4) pages minimum.
- Write your index number clearly at the top of every page of the answer sheets used.

Note: Marks will be awarded for:

- Introduction
- Content
- Conclusion
- Evidence of Further Reading
- Originality and Independence (Cheating would be penalized and integrity rewarded)
- Correct grammar, clarity of expression and logical presentation of facts.
- Answers to questions must be well referenced.

Examiner: Osei-Anim Reindolph

QUESTION 1 (70MARKS)

A. Orchestra Inc. wants to embark on capital investment project whose initial capital requirement is GHC 70 million. This amount is payable at the beginning of the first year of operation. The company wants to ascertain the financial viability or otherwise of the project based on the proposed cashflows shown in the table below

	Year 1	Year 2	Year 3	Year 4
Sales values (units/year)	820,000	884,000	845,000	875,000
Selling price	30.00	30.00	30.00	30.00
Fixed cost per year	900,000	935,000	979,000	941,000
Variable cost	15.00	15.10	15.12	15.14

The information stated above needs some form of adjustment to the account of selling price inflation of 4% per year and 3% inflation for the variable cost. The fixed costs show an incremental trend and they are quoted in nominal terms. The 4-year sales volume is expected to continue in the foreseeable future. Orchestra is expected to pay a corporate tax of 25% one year in arrears. The company can claim tax allowable depreciation on 15% reducing balance basis.

The directors of Orchestra hold the contention that all investment projects must be evaluated over four years of operations with an assumed terminal value of 5% of the initial capital requirement at the end of the fourth year. It should however be noted that both present value and discounted payback period method should be used for the appraisal techniques. The acceptable payback period for projects should be two years. The real after-tax cost of capital of Orchestra Inc. is 7% and its nominal after tax cost of capital is 12%.

Required.

	NOTE ALL AMOUNTS ARE IN GHC	
iv.	Critically discuss the views of the directors of Orchestra Inc. investment appraisal	5MARKS
iii.	Discuss the financial acceptability of the investment project	5MARKS
ii.	Calculate the discounted payback period of the planned investment project	10MARKS
i.	Calculate the net present value of the planned investment project	10MARKS

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B. The Kumasi Metropolitan Assembly is considering building a foot bridge across the Wewe River which crosses the KNUST at two key points. Two proposals are being considered for bridges at different sites. The costs of each of the proposals are summarized as follows

COSTS	BRIDGE A	BRIDGE B
Initial cost of Bridge	GHC 660,000	GHC 600,000
Initial Cost of road works	70,000	GHC 60,000
Annual maintenance of bridge	GHC 6,000	GHC 5,000 for first 15 years and GHC 11,000 there after
		,
Annual maintenance of roads	GHC 5,000	GHC 2,500
Life of Bridge	60 years	30 years
Life of roads	60 years	60 ears

i.	If cost of capital is 9% and making the assessment in terms of present worth which proposal		
	should be adopted and why?	5MARKS	
ii.	What will be equivalent annual cost of the bridges	5MARKS	

iii. The discounted cash flow method is hinged on the assertion of time value of money.

Discuss the possible effects of

α.Inflation	5MARKS
β. Interest	5MARKS
δ . Taxation on the expected outcome of an investment project.	5MARKS

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Activity	Description	Duration	Predecessor
1	Lakamuun project		
2	Design	10	
3	Procure prototypes	10	2
	parts		
4	Fabricate parts	8	2
5	Assemble prototypes	4	3,4
6	Laboratory test	7	5
7	Field test	10	6
8	Adjust design	6	7
9	Order stock	10	8
	components		
10	Order customer	15	8
	components		
11	Assemble test	10	9,10
	production unit		
12	Test unit	5	11
13	Documents results	3	12

C. The Lakamuun project team has started gathering information necessary to develop a project network-predecessor activities and activity time in days. The results of their meeting are found in the following table:

i. Create a network based on the above information. How long will the project take? What is the critical path?5MARKS

ii. Upon further review the team recognizes that they missed three finish-to start lags. Procure prototype parts will involve only 2 days of work but it will take 8 days for the parts to be delivered. Likewise, Order stock components will take 2 days of work and 8 days for delivery and Order custom components 2 days of work and 13 days for delivery.

Reconfigure the Lakamuun schedule by entering the three finish-to-start lags. What impact did these lags have on the original schedule? On the amount of work required completing the project?

5MARKS

iii. Management is still not happy with the schedule and wants the project completed as soon as possible. Unfortunately, they are not willing to approve additional resources. One team member pointed out that the network contained only finish-to-start relationships and that it might be possible to reduce project duration by creating start-to-start lags. After much deliberation the team concluded that the following relationships could be converted into start-to-start lags:

- Procure prototype parts could start 6 days after the start of Design.
- Fabricate parts could start 9 days after the start of Design.
- Laboratory test could begin 1 day after the start of Assemble prototype.

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- Field test could start 5 days after the start of Laboratory test.
- Adjust design could begin 7 days after the start of Field test.
- Order stock and Order custom components could begin 5 days after Adjust design.
- Test unit could begin 9 days after the start of Assemble test production unit.
- Document results could start 3 days after the start of Test unit.

Reconfigure the Lakamuun schedule by entering all nine start-to-start lags. What impact did these lags have on the original schedule (i)? How long will the project take? Is there a change in the critical path? Is there a change in the sensitivity of the network? Why would management like this solution? 5MARKS

2. Project risk management is iterative within itself. Discuss with the aid illustration. 30MARKS

3. The effect of COVID 19 has affected most projects. Discuss how the effect of COVID 19 has impacted on the three broad objectives of projects. **30MARKS**

4. To avoid selecting wrong projects companies should adopt the investment decision making process. Discuss 30MARKS