ZIMBABWE EZEKIEL GUTI UNIVERSITY

DEPARTMENT OF ACCOUNTING AND FINANCE

B. COM ACCOUNTING

COURSE: COST AND MANAGEMENT ACCOUNTING

COURSE CODE: CAC205

DURATION: 3 HOURS

28 JULY 2017

INSTRUCTIONS TO CANDIDATES

1. No cell phones are allowed in the examination venue.
2. Use of silent, non-programmable calculators is allowed.
3. Answer all questions.
4. Begin each question on a new page.
5. The number of marks for each question or part question is shown in brackets.

Question One

A company manufactures and sells a wide range of products. The products are manufactured in various locations and sold in several quite separate markets. The company's operations are organized into five divisions, which may supply each other as well as selling on the open market.

The following financial information is available concerning the company for the year just ended:

	$000
Sales	8,600
Production cost of sales	5,332
Gross profit	3,268
Other expenses	2,532
Net profit	736

An offer to purchase Division 5, which has been performing poorly, has been received by the company.

The gross profit percentage of sales, earned by Division 5 in the year, was half that earned by the company. Division 5 sales were 10% of total company sales. Of the production expenses incurred by Division 5, fixed costs were $316,000. Other expenses (i.e. other than production expenses) incurred by the division totaled $156,000, all of which can be regarded as fixed. These include $38,000 apportionment of general company expenses, which would not be affected by the decision concerning the possible sale of Division 5.

In the year ahead, if Division 5 is not sold, fixed costs of the division would be expected to increase by 5% and variable costs to remain at the same percentage of sales. Sales would be expected to increase by 10%.

If the division is sold, it is expected that some sales of other divisions would be lost. These would provide a contribution to profits of $20,000 in the year ahead. Also, if the division is sold, the capital sum received could be invested to yield a return of $75,000 in the year ahead.

Required

a. Calculate whether it would be in the best interests of the company, based upon the expected situation in the year ahead, to sell Division 5. **(13 marks)**

b. Discuss the factors that you feel should influence the decision. **(7 marks)**

c. Calculate the percentage increase in Division 5 sales required in the year ahead (compared with the current year) for the financial viability of the two alternatives to be the same. (You are to assume that all other factors in the above situation will remain as forecast for the year ahead.) **(5 marks)**

[Total: 25 marks]

Question Two

A company is trying to decide which of two investment projects it should choose. The following information is provided:

	Project 1 ($)	**Project 2 ($)**
Capital Expenditure □	75,000	75,000
Profit - Year 1	30,000	25,000
Profit - Year 2□	30,000	15,000
Profit - Year 3□	20,000	20,000
Profit (or Loss) Year 4	(10,000)	20,000
(Loss) - Year 5	(10,000)	(15,000)

Additional information

i. Each project is expected to be operational for 5 years, at the end of which time there is not expected to be any scrap value.

ii. Capital expenditure for both projects would be incurred immediately. □

iii. The profit figures are shown after including depreciation on a straight-line basis.

iv. Taxation is to be ignored. □

v. The company's cost of capital is 15%. □

vi. The present value of $1 received at the end of:

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
0.869	0.756	0.657	0.571	0.497	0.432

Required

a. Calculate for each project:

i. The payback period in years to 1 decimal place. **(8 marks)**

ii. The net present value. **(8 marks)**

b. State the relative merits of the methods of evaluation mentioned in (a) above. **(6 marks)**

c. Explain which project you would recommend for acceptance. **(3 marks)**

[Total: 25 marks]

Question Three

The current average weekly trading results of the Traditional Restaurant in Bindura are shown below:

		$	$
Turnover			2 800
Operating costs:	Materials	1 540	
	Power	280	
	Staff	340	
	Building occupancy costs	460	2 620
Profit			180

The average selling price of each meal is $4; materials and power may be regarded as a variable cost varying with the number of meals provided. Staff costs are semi-variable with a fixed cost element of $200 per week; the building occupancy costs are all fixed.

Required

a. Calculate the number of meals required to be sold in order to earn a profit of $300 per week. **(5 marks)**

b. The owners of the restaurant are considering expanding their business and using under-utilized space by diversifying into either (1) take-away foods, or (2) high quality meals. The sales estimate for both proposals is rather uncertain and it is recognized that actual sales volume could be up to 20% either higher or lower than that estimated. The estimated sales and costs of each proposal are:

	Take-away foods	High quality meals
Sales volume, per week	720 meals	200 meals
	$	$
Average selling price per meal	1.60	6.00
Variable costs per meal	0.85	4.66
Incremental fixed costs, per week	610.00	282.00

If either of the above proposals were implemented it has been estimated that the existing restaurant's operations would be affected as follows:

- As a result of bulk purchasing, material costs incurred would be reduced by $0.10 per meal. This saving would apply to all meals produced in the existing restaurant.
- Because more people would be aware of the existence of the restaurant it is estimated that turnover would increase. If the 'take-away food' section were opened then for every ten take-away meals sold the existing restaurant's sales would increase by one meal, alternatively if the 'high quality meals' section were open then for every five such meals sold the existing restaurant's sales would increase by one meal.

A specific effect of implementing the 'take-away food' proposal would be a change in the terms of employment of the staff in the existing restaurant, the result of which would be that the staff wage of $340 per week would have to be regarded as a fixed cost.

Required

Calculate, for each of the proposed methods of diversification:

i. The additional profit which would be earned by the owners of the restaurant if the estimated sales were achieved. **(5 marks)**

ii. The sales volume at which the owners of the restaurant would earn no additional profit from the proposed diversification. **(5 marks)**

c. Describe the assumptions underlying cost-volume-profit analysis. **(10 marks)**

[Total: 25 marks]

Question Four

'Budgeting is one of the tools that is used in management accounting to assist with the decision-making process. Not only are they aids to decision-making, budgets are also required to achieve many different aims within an organization.'

Required

a. With the aid of an example, define the budgeting process. **(3 marks)**

b. Clearly outline the importance of a budget. **(12 marks)**

c. List and explain any five types of budgets of your own choice. **(10 marks)**

[Total 25 marks]

End of Paper