

**THE OPEN UNIVERSITY OF SRI LANKA**  
**DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING**



**ECM 3266 - INTRODUCTION TO BUSINESS STUDIES**

**ACADEMIC YEAR 2014/2015**

**FINAL EXAMINATION**

**(CLOSED BOOK)**

**Date : 26<sup>th</sup> SEPTEMBER 2015**

**Time: 0930 – 1230 hr**

*Read the following case study and answer all the questions given below.*

**Food2U LTd.**

Neema and Min Chul started their catering business - Food2U Ltd – six years ago. At first, they cooked food at home and served it in customers' own houses. They catered for parties and small weddings. The business quickly developed a reputation for excellent fresh food and first class service; it was also profitable – the average price per meal was \$4 and variable cost per meal was \$1. Until two years ago, Neema and Min Chul did everything themselves. They ordered supplies, cooked the food and served at the parties. As the business expanded it became clear that help was needed. Four people were recruited last year; one to look after administration of orders, supplies and accounts; two to help in the kitchen and the other one to serve as a driver.

The business was now at an important stage in its development. It could remain a small and specialist firm – successful but with profits limited by few economies of scale and low capacity. On the other hand, Neema and Min chul could take the very big step of expanding the business into a new market segment with potential for growth.

An opportunity for growth has been offered by an existing customer, Harry Brett. He owns a large chain of supermarkets. He was impressed by the quality of the different dishes that he had ordered from Food2U for his wife's birthday party. He asked to meet the two owners the next day. At this meeting he proposed that:

- Food2U should produce food for sale in his supermarkets
- Four of the most popular recipes would be used to start with – each of them an exclusive Food2U meal containing expensive ingredients
- The food would be especially packed for freshness and could be easily cooked at home
- Several hundred packaged meals would be needed each month

Neema and min Chul were excited by this proposal but they also had some concerns. It offered them growth and profits beyond their greatest hopes but several problems could arise:

- Firstly, machinery using new technology would be needed to produce and package the food. How would they afford this?
- Premises would be needed – their own kitchens would be far too small.
- They had built up a small team of committed, well motivated staff. Would this team morale still exist with the 6 extra staff that Min Chul estimated they would need?

They decided to look further into the likely costs and revenues of this proposal. These are shown in **Appendix A**. Neema is worried about how to raise the finance for the purchase of new machines and the lease of larger premises. It was estimated that \$30 000 would be required. She looked at the latest accounts for the business and extract of these appears in **Appendix B**.

Min Chul visited businesses that produced the automated machines that Food2U would need. The machines are computer controlled. This would mean that none of the food would be “handmade”. However, it would always be of consistent quality. Different recipes could also be programmed into the machines quite easily. The existing equipment of the business is depreciated using the straight line method over ten years. Min Chul has heard the diminishing balance method is likely to be more realistic for new machinery.

The owners are excited at the prospect of taking their business into a different market but they will not be rushed into making a decision. They are well aware of the risks of expanding the business too quickly.

### **Appendix A**

#### **New proposal – likely costs and revenues**

Variable cost per meal would fall to \$0.70 (70 cents)

Annual fixed costs of the business would rise to \$44 000

Price paid by supermarkets: \$4 per meal

Total output of the business would double to 15 000 meals per year

### **Appendix B**

#### **Extract from Food2U accounts, October 2004**

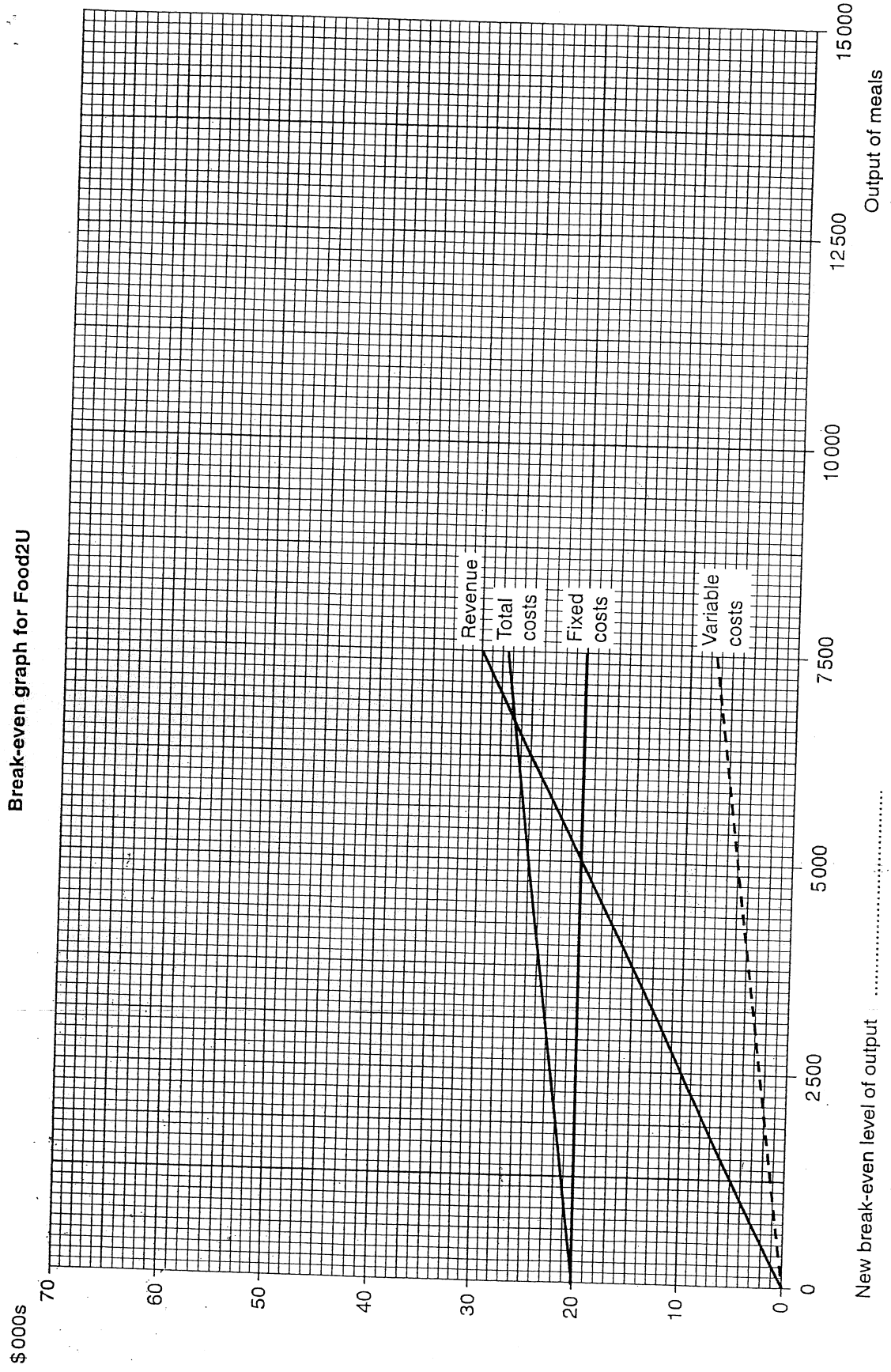
Fixed Assets	\$55 000
Current Assets	\$15 000
Capital Employed	\$60 000
Long Term Loans	\$15 000

*Answer All the Questions*

- Q1) Assume the expansion goes ahead. Discuss how Neema and Min Chul could try to make sure that the larger workforce is committed and well motivated. (15 Marks)
- Q2) (i) The Insert (on next page) shows Food2U's existing break-even graph. Using the data from **Appendix A**, draw the new break – even graph on the Insert. (05 Marks)
- (ii) State the new break – even level of output and new level of profit (at full capacity) in the spaces provided on the Insert . (05 Marks)
- (iii) On the basis of your graph and the other information available, recommend to Neema and Min Chul whether to accept the new proposal. (15 Marks)
- Q3) (i) Using the data in **Appendix B**, calculate the current gearing ratio for Food2U. (05 Marks)
- (ii) Evaluate possible methods of financing the purchase of the machines and the lease of the new premises. (20Marks)
- Q4) Advise Min Chul on how to depreciate the new machinery. Justify your answer. (No calculations are required)(15 Marks)
- Q5) Assume that Food2U decide to supply the supermarkets. Evaluate the factors that will determine the future level of sales of the meals. (20 Marks)

Insert

Break-even graph for Food2U



New break-even level of output .....

New level of profit (at full capacity) \$ .....