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3.3 BREAK-EVEN ANALYSIS: EXAM PRACTICE QUESTION

Read the case study information below and answer the questions that follow.

INFORMATICS



Informatics manufactures computers and is based in Sri Lanka. Informatics uses a method of batch production and manufactures batches of computers according to customer specifications such as computer speed and screen size. Production workers are paid by the hour but receive a lower than average wage for Sri Lanka. To compensate they are

offered long-term job security and other non-financial rewards.

Informatics does **not** sell locally in Sri Lanka, but exports 4000 computers a year to Pakistan using local independent distributors who have knowledge of the local market as well as experience in delivering and installing computers. 90% of Informatics' sales are organized through such distribution channels. Because using local independent distributors increases the final price of the computer to the customer, senior managers have decided to offer customers in Pakistan the opportunity to purchase computers directly from Informatics. Customers have to telephone orders to Informatics in Sri Lanka from Pakistan because e-commerce sales are not available.

Informatics' Board of Directors is currently considering expansion into the Indian market using the same type of distribution channel employed in Pakistan.

The following are Informatics' expense and sales price figures:

- Fixed costs of \$100 000 per year
- Variable costs of 80 % of the sales price
- Sales price of \$1000 per computer.

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IB Business Management – Finance and Accounts

3.3: Break-Even Analysis: Exam Practice Question

25 MARKS, 45 MINUTES

1. Identify **two** fixed costs for Informatics. **[2 marks]**

2. For Informatics:
 - i. Calculate the break-even quantity in units (show all of your working). **[3 marks]**

 - ii. Calculate the margin of safety in units (show all of your working). **[2 marks]**

 - iii. Calculate the net profit if 4000 computers are sold (show all of your working). **[2 marks]**

3. Prepare a fully labelled break-even chart. **[5 marks]**

4. Calculate the new number of computers that would need to be manufactured and sold at the current price for Informatics to make a profit of \$2,000,000 from both the Pakistani and Indian markets combined, if the Board of Directors decided to proceed with the expansion into India. **[3 marks]**

5. Evaluate the usefulness of breakeven analysis to firms such as Informatics. **[8 marks]**