



## Chapter 7 Class Exam

Name: \_\_\_\_\_

Score: \_\_\_\_\_

**Answer all questions**

**Suggested Exam Length: 40 minutes**

### Student Input (Pre-exam)



How confident are you about this exam?

What topic am I worried about before I look at the exam? Why?

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What strategies did you use to study for this exam? What was the best one?

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Which activities in class did you most enjoy for this topic?

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### Student Reflection (Post-exam)



How happy were you with your result?

What were the hardest questions? Why?

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Is there any exam technique I should change/use again for my next exam?

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What topics should I look over again?

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# Chapter Exam



Fulfil Protein Bars combine high protein content with added vitamins, targeting health-conscious consumers and reducing reliance on imported brands.

**(a)** Explain how both 'Market Trends' and 'Technological Advancements' can impact on idea development for a food producer like Fulfil protein bars.

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**(b) (i)** Explain what is meant by '*design thinking*' as an approach to idea development for a business.

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**(ii)** Outline how the process is **iterative** in its approach.

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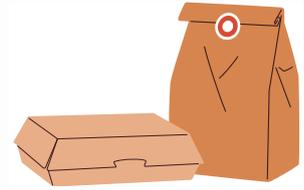


# Chapter Exam

(c) GreenCrate is a small Irish start-up tackling single-use plastic in food delivery. The team ran focus groups with customers and restaurants to understand key issues, including difficulty returning containers and concerns about food staying hot.

Based on the feedback, the team developed several ideas. They focused on creating an insulated delivery crate made from recycled materials, with a simple return process using a scannable code. They built a first working model and tested it with selected restaurants. Customers gave feedback on the crate's size, insulation, and ease of use. GreenCrate then improved the design, making it sturdier and clearer to return.

The updated version was trialled in one area, where more feedback helped them refine it further before expanding the product more widely.



Outline how GreenCrate applied different stages of design thinking when developing their new product.

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## Chapter 7 Marking Scheme – Total 48 marks

(a) (i) 8m – 2 @ 4m (2+2)

### Market Trends

Market trends help a business spot what customers are looking for in real time using surveys, observation, customer feedback...

Fulfil may respond to trends towards more sustainable and ethical products by making their packaging compostable.

### Technological Advancements

New food technology may allow producers to develop improved product features or create new ways to deliver their products quicker or cheaper to customers.

Fulfil could try to use advancements in food science to improve their flavours and nutrition, or offer next day delivery for orders on their App.

(b) (i) 4m (2+2) (ii) 4m (2+2)

(i) An innovative, **non-linear approach** to the development of products and services which focuses on **solutions for the end user**. It is **iterative, person-centred** and **solution-centred** in its approach.

(ii) Design thinking is iterative because it uses **trial and error to test and improve ideas** before finalising them.

Businesses create **prototypes, gather feedback, and refine their designs** through **multiple cycles of testing through trials** with samples of their target market.





**(c) 20 marks (4 @ 5 marks each (2+2+1) state, explain, relate) NOTE: stages must be in order**

## **Clarify**

This stage involves gaining a deep understanding of the user's problems using methods like focus groups or interviews.

GreenCrate built an understanding of user problems through customer complaints and ran focus groups to identify the main issues like excess plastic and inconvenient returns.

## **Ideate**

Teams try to generate a wide range of creative solutions through methods like brainstorming, focusing on creating solutions for user's problems.

To solve user's problems, GreenCrate designed an insulated delivery crate made from recycled materials with a scannable return code.

## **Develop**

The most promising ideas are turned into prototypes, allowing teams to explore how the solution might function in reality and test it out.

GreenCrate built a working model of the crate and tested it with restaurants to gather feedback on usability, insulation, and return process.

## **Implement**

Prototypes are tested with a larger pool of real users, and feedback is used to refine the product further before launch.

GreenCrate trialled the improved design in one area, using feedback to make further refinements before wider rollout.





**(d) 12 marks (2 @ 6 marks each (2m + 2m + 2m) State, explain, some evaluation shown)**

**1. Financial Feasibility – It reduced the risk of financial loss.**

Financial feasibility assesses whether the business can be profitable and if there is enough capital to fund start-up costs and maintain cash flow in the early stages.

RePlay Arcade’s feasibility study showed that renting a city centre venue was too expensive, which would have strained their limited budget. This evidence allowed them to make a more sustainable decision to launch as a weekend pop-up instead. The study allowed them to scale back plans as it was supported by clear cost projections and risk awareness.

**2. Production Feasibility – It helped them assess if the idea could be delivered with available resources.**

Production feasibility examines whether the business can access the equipment, materials, or skills needed to create and deliver the product or service.

RePlay Arcade’s study revealed that while arcade machines were available second-hand, transporting and maintaining them would be costly. This evidence showed that their original plan might need additional capital available to cover the sourcing and ongoing maintenance of machines.

**3. Market Feasibility – It confirmed there was enough demand for the idea.**

Market feasibility checks whether the planned target market is large enough and examines competition and pricing based on research like surveys or trend analysis.

RePlay Arcade surveyed students and young adults and found strong interest in their concept, particularly at weekends. This evidence reassured them that the idea could attract regular footfall. Although weekday demand was uncertain, the study helped them confidently proceed with a scaled-back weekend model.

