

Write your name here	
Surname	Other names
Edexcel Principal Learning	Centre Number
	Candidate Number
Manufacturing and Product Design	
Level 3	
Unit 1: Manufacturing Business Principles	
Tuesday 25 May 2010 – Afternoon Time: 1 hour 30 minutes	Paper Reference MP301/01
You may use a calculator.	Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 90.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

H37952A

©2010 Edexcel Limited.
5/4/2



Turn over ►

edexcel
advancing learning, changing lives

Answer ALL questions. Write your answers in the space provided.

1 State the key business functions which would be responsible for dealing with the following activities.

Activity

Ensuring goods are delivered on time and in a cost effective way

Key Business Function

Activity

Testing the acceptance of new products with potential customers

Key Business Function

(Total for Question 1 = 2 marks)

2 Identify **two** characteristics of a micro-enterprise.

1

2

(Total for Question 2 = 2 marks)



7 Car production has been affected by the world market economy.

Describe why a government would subsidise a car manufacturer.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(Total for Question 7 = 4 marks)

8 Outline **three** ways in which a manufacturing enterprise can improve its environmental credibility.

1

.....

.....

.....

2

.....

.....

.....

3

.....

.....

.....

(Total for Question 8 = 6 marks)



11 A sportswear manufacturer considers product marketing to be a high priority. State **three** reasons why this is a financial investment.

1

2

3

(Total for Question 11 = 3 marks)

12 A manufacturer of kitchen appliances measures costs in different ways.

(a) What is meant by the term **variable cost**?

(2)

(b) Explain how an indirect cost can also be considered as a fixed cost.

(4)

(Total for Question 12 = 6 marks)



14 Explain what is meant by the term **cost benefit analysis**.

.....

.....

.....

.....

.....

.....

.....

(Total for Question 14 = 3 marks)



15 In a full year, a manufacturing enterprise generates total sales of £390 000 and has total costs of £370 000.

Advertising 10%

Rent/rates 10%

Materials 30%

Utilities 10%

Wages 40%

(a) In the table below write the missing details in the correct position.

(5)

PROFIT AND LOSS ACCOUNT			
	£000	£000	£000
Income			
Cost of Sales			
Total			
GROSS PROFIT/LOSS			
Promotions			
Total			
Expenses			
Total			
NET PROFIT/LOSS BEFORE TAX			



(b) Express the net profit/loss in percentage terms.

(2)

.....

.....

.....

.....

(Total for Question 15 = 7 marks)



16 The following table shows a cost benefit analysis for developing two products, X and Y.

Product	X	Y
Period over which benefits are calculated	18 months	12 months
Costs		
Design and development	£60 000	£52 000
Promotion	£5 500	£4 200
Administration	£11 000	£7 000
Facilities	£17 200	£14 000
Evaluation costs	£2 000	£3 500
Public consultation costs	£ 300	£ 200
Total costs	£96 000	£80 900
Benefits		
Labour saving	£18 200	£21 500
Productivity increases	£20 600	£12 700
Other cost savings	£27 000	£19 100
Other income generated	£11 100	£10 100
Total benefits	£76 900	£63 400

(a) (i) Calculate the return on investment for each product, correct to 1 decimal place.

(3)

Show your calculations here for Product X and Product Y

Answer for Product X

Answer for Product Y

(ii) State which product should be developed using the return on investment method.

(1)



(b) (i) Calculate the payback method for each product, in months.

(3)

Show your calculations here for Product X and Product Y

Answer for Product X

Answer for Product Y

(ii) State which product should be developed using the payback method.

(1)

(c) Explain which product you would develop by comparing your answers to (a)(ii) and (b)(ii).

(2)

(Total for Question 16 = 10 marks)

TOTAL FOR PAPER = 90 MARKS



BLANK PAGE

