



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

---

**BUSINESS STUDIES**

**0450/21**

Paper 2

**October/November 2016**

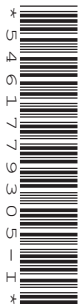
INSERT

**1 hour 30 minutes**

---

**READ THESE INSTRUCTIONS FIRST**

This Insert contains the case study material.  
Anything the candidate writes on this Insert will not be marked.



---

The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **3** printed pages and **1** blank page.

## P & P Paint

P & P is a large private limited company in country X. It has been in business for 15 years. It has one large factory near to the capital city. The factory is located next to a river that flows through the city.

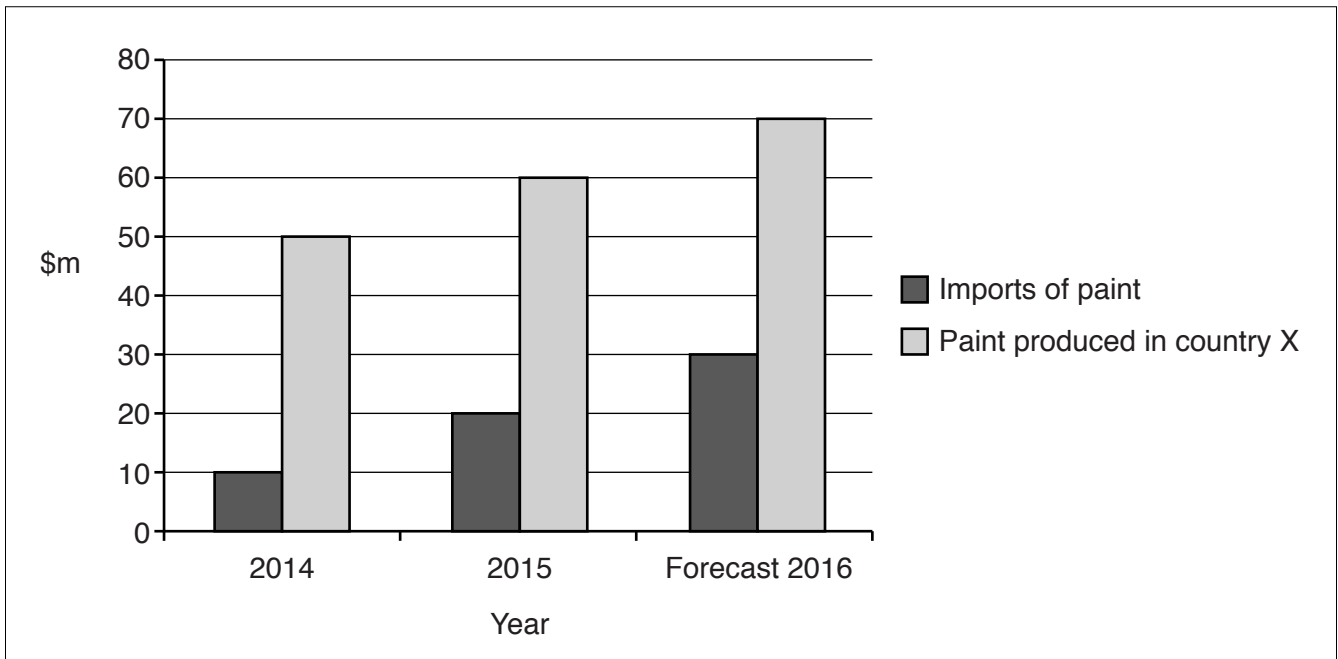
Paint is produced from imported raw materials and then the tins (cans) of paint are sold to large shops in country X. Paint is produced using batch production for each type of paint. P & P employs 150 production workers in its factory and most employees live near to the factory. They are paid using time rate, they do not have any fringe benefits and are managed using an autocratic leadership style.

P & P has developed a new type of paint. It is waterproof and suitable for painting the outside of houses. It is about to be launched in country X. The target customers are professional painters and people who want to improve their own homes.

P & P plans to start selling paint in other countries in 2018. The directors will have to consider what changes the business will need to make if P & P is to expand by exporting its paint.

## Appendix 1

**Total market sales of paint in country X (\$m)**



**Appendix 2**

To: Managing Director  
From: Operations manager  
Date: 10 October 2016  
Re: Increasing paint production

In answer to your queries we have the following two options:

**Option A**

We could produce 200 000 tins of paint per year in a new factory on the other side of the city. There are no houses near this site. The land could be bought for \$100 000. The factory building and machinery would cost \$50 000. We would need a bank loan for the whole amount and would pay an interest rate of 10% per year. We would also keep our existing factory open.

**Option B**

Extend the existing factory and lease additional machinery. This would cost \$75 000 to extend the factory. This machinery could be leased at an annual cost of \$10 000. We would still need a bank loan for the cost of extending the factory at an interest rate of 10% per year. With this option we could produce an additional 102 500 tins of paint per year.

**Appendix 3****Main News****16 October 2016**

The process of paint making at P & P results in a lot of dangerous waste being produced which is put into the river. The river is now very polluted as other factories put their waste into the river as well. All the fish have died and local people who used to fish in the river must now buy fish from their local market.

Local people are also worried that their children may become ill due to the pollution if they play in the river. Some people who live near P & P's factory have formed a pressure group to persuade the management to change the way they make paint. P & P is unlikely to change the production process as its factory is not the only one which puts waste into the river. P & P also employs a lot of local people and they worry about keeping their jobs.

It will cost P & P over \$5 000 per year to clean the waste before it is put into the river. Competitors which produce paint abroad do not have legal controls about cleaning waste products. The Government of country X will need to consider all these points when deciding whether or not to introduce new legal controls on pollution.

**BLANK PAGE**

---

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at [www.cie.org.uk](http://www.cie.org.uk) after the live examination series.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.