CMP Upgrade 2019/20

Subject CB2

CMP Upgrade

This CMP Upgrade lists the changes to the Syllabus objectives, Core Reading and the ActEd material since last year that might realistically affect your chance of success in the exam. It is produced so that you can manually amend your 2019 CMP to make it suitable for study for the 2020 exams. It includes replacement pages and additional pages where appropriate. Alternatively, you can buy a full set of up-to-date Course Notes / CMP at a significantly reduced price if you have previously bought the full-price Course Notes / CMP in this subject. Please see our 2020 *Student Brochure* for more details.

This CMP Upgrade contains:

- all significant changes to the Syllabus objectives and Core Reading.
- additional changes to the ActEd Course Notes and Assignments that will make them suitable for study for the 2020 exams.

1 Changes to the Syllabus objectives

There have been no changes to the Syllabus objectives themselves for Subject CB2 for the 2020 exam session. There have, however, been some small changes to the allocation of Syllabus objectives across the modules of Subject CB2. These changes are set out in this section.

Module 10

Syllabus Objectives 3.2.2 and 3.2.3 have been moved to Module 19.

Module 13

Syllabus Objectives 3.3.1 and 3.3.2 have been moved to Module 22.

2 Changes to the Core Reading and ActEd text

This section contains all the ***non-trivial*** changes to the Core Reading and ActEd text.

Additional textbook

The additional textbook ('Economics for Business') referenced in the 2019 Course Notes and CMP is no longer part of the Core Reading for the 2020 exams. Sections from the main textbook, 'Economics' by John Sloman, Dean Garratt, and Jon Guest (10th edition), still form the majority of the Core Reading. Where references to the additional textbook have been removed for 2020, they have either been replaced with additional Core Reading directly in the Course Notes and CMP, or not replaced at all and hence removed from the material altogether.

The rest of this section contains details of the Core Reading removed, and where applicable, any replacement Core Reading for the relevant modules. Any replacement Core Reading and ActEd text is provided on separate sheets so you can easily remove them from this document and insert them into your 2019 Course Notes or CMP.

Module 2

Page 5

The paragraph of Core Reading about Marx has been amended and now reads:

However, Marx argued, the owners of capital make the workers work in excess of what is necessary to sustain them; workers could work 10 hours but be paid £6. Marx viewed profits as the increase in the value of capital invested. This surplus value is created by workers in excess of their own labour costs but is claimed and kept by the owners of capital.

Module 9

Sections 3 and 4 have been amended to reflect the replacement of the additional textbook with additional Core Reading. Replacement pages are attached.

Module 10

Section 6

References to the additional textbook in this section have been removed and have not been replaced with any other Core Reading. Section 6 of Module 10 has therefore been removed from the Course Notes and CMP for the 2020 exams.

Practice questions

Questions 10.10, 10.11 and 10.12 have been removed from the Practice Questions at the end of Module 10. Question 10.11 has been moved to be in the Practice Questions at the end of Module 19.

Module 13

Section 1

References to the additional textbook in this section have been removed and have not been replaced with any other Core Reading. Section 1 of Module 13 has therefore been removed from the Course Notes and CMP for the 2020 exams.

Practice questions

Questions 13.1 and 13.2 have been removed from the Practice Questions at the end of Module 13.

Module 20

Section 3

The reading under Section 3.3 of Module 20 still includes Section 4 of Chapter 22 of the textbook, however, it now excludes the subsection *'Taylor rules and the DAD/DAS framework'.*

3 Changes to the X Assignments

Overall

There have been minor changes which are listed below.

Assignment X1

There have been no changes to Assignment X1

Assignment X2

Question 2.6

Question 2.6 from Assignment X2 has been removed and replaced with the following question:

The record of a country's transactions in goods and services and assets with the rest of the world is referred to as its:

A balance of trade.
B capital account.
C balance of payments.
D current account. [1½]

The solution now reads:

Option C.

Balance of trade refers to the balance of imports and exports of both goods and services and covers two of the four subdivisions of the current account. The other two subdivisions of the current account are income flows and current transfers of money. The capital account records the flows of funds into (credits) and out of (debits) the country in relation to fixed assets, the transfer of funds by migrants, government grants for overseas projects, government debt forgiveness and the receipt of money for capital projects. The current account and the capital account are two of the three main parts of the balance of payments account. The third main part is the financial account. [1½]

Question 2.33

Question 2.33 from Assignment X2 has been reworded, and now reads:

(i) Assume that the public holds all of its money in bank accounts, the banks' liquidity ratio is 12.5% and the monetary base is \$100 million.

(a) Calculate the money multiplier and hence the value of the broad money supply.

(b) Suppose banks reduce their proportion of liquid reserves to deposits from 12.5% to 10%, calculate the revised value of the broad money supply. [3]

(ii) Suppose the public instead decide to hold cash equal in value to 20% of the value of their bank deposits, rather than deposit all their money in the banks.

(a) Explain what would happen to the value of the money multiplier.

(b) Calculate the revised values of the money multiplier and the broad money supply, assuming that the banks' ratio of liquid reserves to deposits is still 10%. [2]

[Total 5]

The solution is largely unchanged, but one paragraph in the solution to part (i)(a) has been amended and now reads:

where r is the banks' reserve, or liquidity, ratio and c is the cash-to-deposits ratio, ie the cash held by the public outside the banking system, expressed as a proportion of their bank deposits. Here $r = 0.125$ and $c = 0$.

Assignment X3

There have been no changes to Assignment X3

4 Other tuition services

In addition to the CMP you might find the following services helpful with your study.

4.1 Study material

We also offer the following study material in Subject CB2:

- Flashcards
- Revision Notes
- ASET (ActEd Solutions with Exam Technique) and Mini-ASET
- Mock Exam and AMP (Additional Mock Pack).

For further details on ActEd's study materials, please refer to the 2020 *Student Brochure*, which is available from the ActEd website at **www.ActEd.co.uk**.

4.2 Tutorials

We offer the following (face-to-face and/or online) tutorials in Subject CB2:

- a set of Regular Tutorials (lasting three full days)
- a Block (or Split Block) Tutorial (lasting three full days)

For further details on ActEd's tutorials, please refer to our latest *Tuition Bulletin*, which is available from the ActEd website at **www.ActEd.co.uk**.

4.3 Marking

You can have your attempts at any of our assignments or mock exams marked by ActEd. When marking your scripts, we aim to provide specific advice to improve your chances of success in the exam and to return your scripts as quickly as possible.

For further details on ActEd's marking services, please refer to the 2020 *Student Brochure*, which is available from the ActEd website at **www.ActEd.co.uk**.

4.4 Feedback on the study material

ActEd is always pleased to get feedback from students about any aspect of our study programmes. Please let us know if you have any specific comments (*eg* about certain sections of the notes or particular questions) or general suggestions about how we can improve the study material. We will incorporate as many of your suggestions as we can when we update the course material each year.

If you have any comments on this course please send them by email to **CB2@bpp.com**.

3 Multiple product pricing

This section of additional Core Reading introduces two more pricing strategies (*loss leaders* and *full-range pricing*), and also considers how to price *by-products*.

3.1 Pricing strategy for multiple products

The basic theory of the firm is explained in terms of a firm producing a single product. In practice, most firms produce a range of products which are sold in one or more markets. The pricing of such multiple products raises additional issues due to the relationships between demand patterns and cost structures between the products.

The rest of this section considers possible pricing considerations under various production scenarios.

Full-range pricing and the use of loss leaders

It is usual for a business to consider prices over its full range of products, rather than individually, in order to maximise its profit across all products. This is referred to as 'full-range pricing'.

A key part of this strategy can be to offer 'loss leaders' – products which are sold at low prices (sometimes below cost). The aim is to attract customers into the business where it is hoped they will buy additional products; the prices of which are higher relative to costs and so contribute more to the firm's profits. The success of this strategy depends on the price elasticity of demand for the loss leader product. The higher this is, the more customers will be attracted by it.

Complementary and substitute products

If a firm produces complementary products, sales of one product can lead to increased sales of a complement, depending on the cross-price elasticities of demand. Conversely, if a firm produces substitute products, sales of one can lead to reduced sales of a substitute. Therefore, prices should be determined jointly to maximise total revenue and profit.

By-products

A by-product is a good which is produced as a consequence of producing the main product. If there is demand for this by-product, the firm needs to consider whether it is profitable to sell it. To do this, it needs to determine the correct costs of its production and marketing.

In theory, the main and by-product would be considered together, looking at the combined curves for Marginal Cost and Marginal Revenue and producing at the combined output where MC equals MR in order to maximise profits.

The theoretical optimum pricing strategy for complementary, substitute and by-products all follow the same logic as full-range pricing. The logic is that pricing and output decisions should be made jointly across all products by taking into account the combined cost and revenue curves to maximise overall profit, as opposed to making the decisions for each product in isolation.

However, in practice, most firms will determine the cost of the by-product separately as long as the price of the main product covers the production costs.

The costs which then need to be covered in pricing the by-product are:

- **Raw materials and other input costs – costs which are already covered by the main product are assigned a zero cost.**
- **Packaging, marketing and distribution – costs which are separate from those for the main product need to be covered by the by-product.**

The aim will be to price the by-product so that the price at least covers its marginal costs and, preferably, provides a contribution to fixed costs and to the costs of producing the main product.

3.2 Checklist

Task	*√when completed*
Ensure that you can:	
• define the following key terms:	
– loss leader	☐
– full-range pricing	☐
– by-product	☐
• give examples of situations in which a firm considers the pricing of its products as a whole rather than as individual products.	☐

3.3 Questions

Question

(i) Explain how a profit-maximising firm ought to determine the price of a by-product.

(ii) State how firms often decide on the viability of selling a by-product in practice.

Solution

(i) ***How a profit-maximising firm ought to determine the price of a by-product***

First the firm needs to allocate the costs of production as far as possible between the primary product and the by-product. It should then add the marginal costs (*MC*) from each product to get a *MC* curve for the combined product.

Likewise, the marginal revenue (*MR*) curves for each product need to first be identified separately, and then summed to obtain a combined *MR* curve. The profit-maximising combined output then arises at the output level where the combined *MR* and *MC* curves intersect.

Finally, the combined output should be split into the corresponding individual outputs of each product, and the price for both the primary product and the by-product, obtained from the individual demand curves.

(ii) ***How firms often decide on the viability of selling a by-product in practice***

In practice, many firms first of all decide whether or not to produce the primary product. If they do, they will then sell the by-product if the specific costs associated with preparing it for sale are more than covered by the price it can be sold at.

4 Pricing and the product life cycle

This section introduces the product life cycle and describes the key characteristics of each stage. This section consists of additional Core Reading which includes a Mobile Phone Industry case study.

4.1 Pricing and the product life cycle

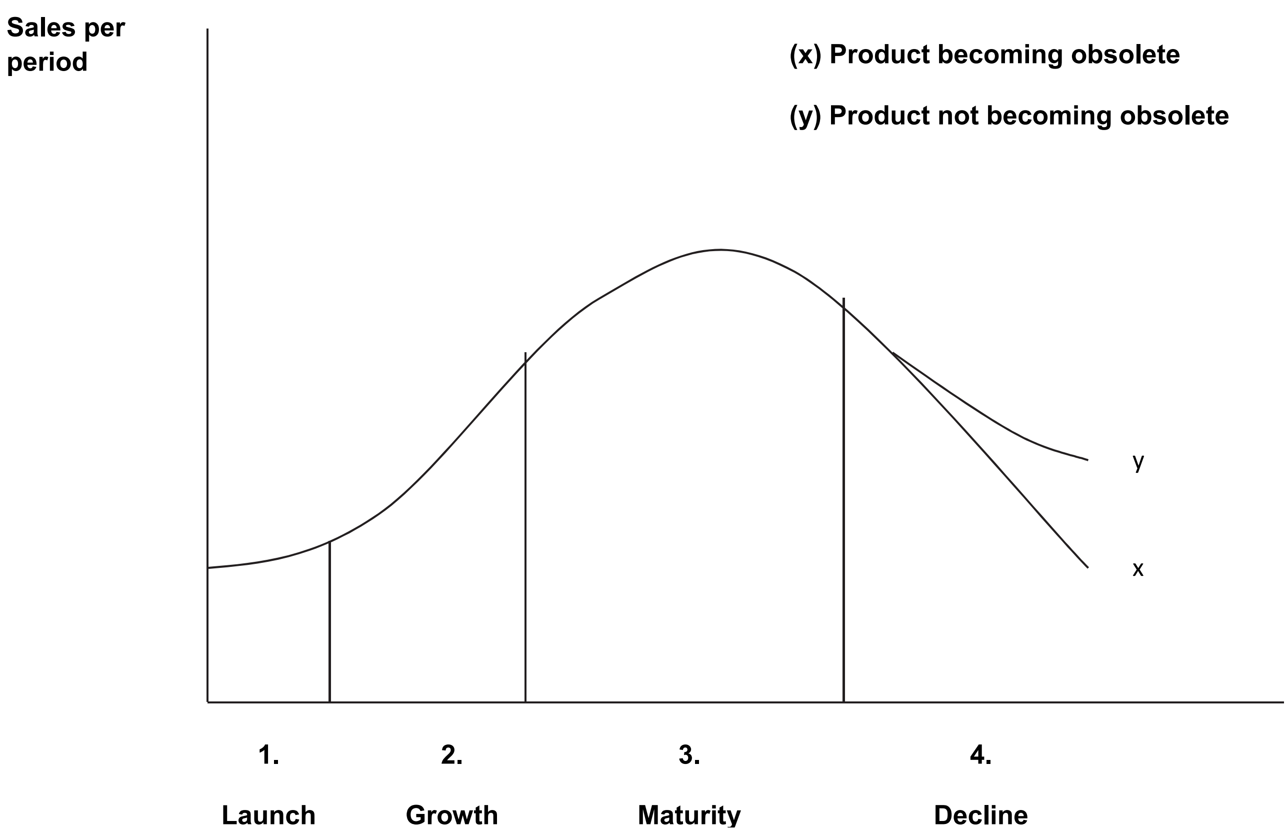
The four stages of the product cycle are:

1. **Launch – the initial phase of early sales and product recognition**
2. **Growth – the phase of a rapid growth in sales**
3. **Maturity – a phase with a slower growth rate as the market matures and becomes saturated**
4. **Decline – the period of a decline in sales as price cutting among existing firms takes place and as new versions of the product come out, or the product is replaced by new superior products.**

Some examples of specific products which could be argued to currently be in each stage are:

- *launch* – electric cars, biodiesel
- *growth* – smartwatches, large LED televisions
- *maturity* – washing machines, do-it-yourself (DIY) products
- *decline* – analogue televisions, traditional (non-smart) phones.

The diagram below forms part of the Core Reading and illustrates how product sales vary over the stages of the product life cycle.



Each phase has characteristics in terms of competition, consumer demand and price which can be summarised as follows:

- **Launch**
  - **Usually, just one firm launches a new product, so the market is a monopoly industry at the outset.**
  - **If the product is very innovative, there will be a lack of substitutes and so a price-inelastic demand will exist. Hence, the launch firm may charge high prices and make high profits.**
  - **However, this will attract rival producers into the market, depending on the extent of the barriers to entry.**
  - **To help to counteract this, the launch firm may decide to set lower prices and aim instead for high sales, building extensive penetration in the market and high brand awareness.**
- **Growth**
  - **As rivals enter the market, the industry becomes oligopolistic, with competitors following the prices set by the launch firm.**
  - **Firms will seek to differentiate their products with minor differences in design.**
  - **Demand for the product is growing and so all firms can increase their sales.**
- **Maturity**
  - **When the market has grown large, the industry includes many firms competing for a share of the sales.**
  - **Growth in sales is slowing and so competition in terms of price and product design intensifies.**
- **Decline**
  - **In this stage, sales fall and there is intense competition. Some firms will fail.**
  - **In the extreme, the product may become obsolete and the market will tail off and perhaps disappear – x on the diagram.**
  - **Alternatively, sales may plateau as long as demand for the product remains – y on the diagram. At this point, the market may revert to an oligopoly.**

This product cycle does not just apply to goods, but also applies in service industries, including insurance and banking.

4.2 Mobile phone industry case study

This case study forms part of the Core Reading and so could be tested in the exam.

The very first mobile phones were a radically new product and so the company launching these was able to charge a high price and make large profits. At this stage, the market for this product was expanding rapidly and the price-inelastic demand supported the high price policy.

At the growth stage, the high profits, rapid growth and low barriers to entry attracted other companies to enter the market and as the sales were expanding rapidly, all firms expanded their sales with very little price competition. The firms in the oligopoly competed in terms of minor product differences and followed the price set by the market leaders.

The mobile phone market has since reached its maturity stage with many firms competing. The slowing of the growth in sales has meant more competition and companies following a more aggressive pricing policy in order to maintain their market share. The companies have introduced new models with better capabilities in order to rejuvenate the market and encourage consumers to upgrade to new models.

With the growing sales for smart phones the market for the traditional mobile phones has declined and may eventually become obsolete.

4.3 Checklist

Task	***√when completed***
Ensure that you can:	
• describe the four stages of the product life cycle	☐
• explain and illustrate how pricing varies with each stage in the life of a product.	☐

4.4 Questions

Question

Explain how the degree of competition is likely to vary during the four stages of the product life cycle.

Solution

Competition is likely to be low during the *launch stage* of the product life cycle. This is because the firm is likely to have a monopoly on the new product, unless its rivals are simultaneously launching similar products.

Unless there are strong barriers to entry, competition is likely to increase during the *growth stage* of the product life cycle, as the rapid growth in sales and possibly profits will attract new entrants into the market. The pricing policy adopted by the original firm will partly determine the number of new entrants – a low price being a deterrent to entry. It is possible that the market will become oligopolistic and firms may collude to try and maintain prices and profit levels. New firms might just follow the leader on price, but might compete with minor product differences.

As new firms continue to enter the market, so competition is likely to increase even further during the *maturity stage* of the product life cycle. Any collusion may break down and price wars may break out as firms fight for market share.

During the *decline stage* of the product life cycle, the level of competition may actually reduce, as some firms are unable to make profits and so leave the industry. The remaining industry may then become more oligopolistic again.