

# Subject SP4

## CMP Upgrade 2023/24

### CMP Upgrade

This CMP Upgrade lists the changes to the Syllabus, 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 2023 CMP to make it suitable for study for the 2024 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 2024 *Student Brochure* for more details.

We only accept the current version of assignments for marking, *ie* those published for the sessions leading to the 2024 exams. If you wish to submit your scripts for marking but only have an old version, then you can order the current assignments free of charge if you have purchased the same assignments in the same subject in a previous year, and have purchased marking for the 2024 session.

This CMP Upgrade contains:

- all significant changes to the Syllabus and Core Reading
- additional changes to the ActEd Course Notes and Assignments that will make them suitable for study for the 2024 exams.

# 1 Changes to the Syllabus

This section contains all the *non-trivial* changes to the syllabus objectives.

## **Objective 0**

Objective 0 has been removed.

## **Objective 1**

Objective 1 now has an introductory paragraph as follows:

Develops an understanding of the concept of benefit provision, the key stakeholders involved, their roles and responsibilities, and the environment in which the benefits are provided.

For Objective 1.1, the sentence before the bullet points has been rewritten as follows:

- 1.1 Understand the roles and responsibilities of stakeholders in the provision of benefits:  
(Chapter 2)

A new bullet point has been added, which is the penultimate point in the list:

- consultants and other professional advisors

For Objective 1.2, change the start of the objective from 'Compare the provision ...' to 'Understand and compare the provision ...'.

For Objective 1.3, the sentence before the bullet points has been rewritten as follows:

- 1.3 Identify the impact of the environment in which benefits are provided on stakeholders:  
(Chapters 3 & 4)

For Objective 1.4, change the start of the objective from 'Discuss the issues surrounding ...' to 'Understand the relevance, and impact of, ...'.

## **Objective 2**

Objective 2 now has an introductory paragraph as follows:

Explore the factors to consider when designing and financing pension and other benefit arrangements.

For Objective 2.1, change the start of the objective from 'Describe the different ...' to 'Understand the different ...'. The following bullet point should be added to the end of the bullet point list:

- insurance products, including protection and annuity policies.

With the addition of this bullet point, this objective is now also covered in part in Chapter 22 of the Course Notes.

For Objective 2.2, change the start of the objective from 'Discuss the factors ...' to 'Understand the factors ...'. Add to the end of the last bullet point inside the bracket: 'and when assets are to be invested'.

### **Objective 3**

Objective 3 now has an introductory paragraph as follows:

Understand potential risks affecting key aspects of benefit design and financing, as well as how these are managed and reported.

For Objective 3.1, change the start of the objective from 'Describe the risks ...' to 'Understand the risks ...'. The following should be added at the end of the bullet list 'including risks which can, and cannot, be mitigated through the use of insurance products.'

For Objective 3.2, change the introduction to the bullet point list and the first bullet point (the remaining bullet points are unchanged) as follows:

- 3.2 Understand the factors that need to be considered when providing information to meet accounting standards: (Chapter 4)
- purpose of accounting standards

Objective 3.3 has been rewritten as follows:

- 3.3 Identify the main factors to consider when setting appropriate terms and consent requirements in respect of the options provided to members of benefit arrangements, taking into account the risk and reward for all stakeholders. (Chapter 8)

For Objective 3.4, change the start of the objective from 'Discuss the factors taken into account ...' to 'Identify the factors to consider when ...'.

Objective 3.5 has been removed.

### **Objective 4**

Objective 4 now has an introductory paragraph as follows:

Principles of using actuarial models and setting assumptions, their use in valuing benefits and contributions, and the impacts on stakeholders.

For Objective 4.1, change the start of the objective from 'Discuss the use of actuarial models ...' to 'Use of relevant actuarial models ...'.

For Objective 4.2, change the start of the objective from 'Discuss the principles ...' to 'Use the principles ...'. In the last bullet point replace '... the various parties involved.' with '... stakeholders.'.

For Objective 4.3, change the introduction to the bullet point list as follows and remove the wording after the last bullet point about performing calculations:

- 4.3 Determine values for assets, past and future benefits and future contribution requirements and perform calculations using the main methods: (Chapters 17,18 &19)

For Objective 4.4, change the start of the objective from 'Discuss the principles underlying the determination of ...' to 'Use relevant principles to determine ...'.

***Objective 5***

Objective 5 now has an introductory paragraph as follows:

Explore how experience can be monitored and analysed in a quantifiable manner.

For Objective 5.1, remove the word 'discuss'.

***Objective 6***

Objective 6 has been removed.

## 2 Changes to the Core Reading

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

### Syllabus

The syllabus objectives at the start of each chapter should be updated as set out in Section 1.

The syllabus objective for Chapter 24 has been removed and should be replaced with:

*This chapter does not cover any syllabus objectives directly. The main objective of this chapter is to focus on the skills that will help you to pass the Subject SP4 examination.*

The syllabus objective for the Glossary has now been removed and should be replaced with:

*This Glossary is not covered directly by the syllabus objectives.*

### Chapter 1

#### Section 0

Amendments have been made to the Core Reading (and ActEd text). Replacement pages 1, 2a and 2b are included at the end of this document.

#### Section 3.1

This section should be removed.

### Chapter 5

#### Section 7.5

The following paragraph should be added at the start of the section:

**Hybrid schemes offer a mixture of defined benefit and defined contribution benefits, and/or share the risks between various parties. The benefits can take many forms and further examples are given in the chapter on general scheme design.**

The last paragraph of Core Reading in this section should be removed.

### Chapter 13

#### Section 0

In the Core Reading paragraph, replace '**Spring 2022**' with '**Spring 2023**'.

### Chapter 20

#### Section 1

In the second bullet point in the first bullet point list, replace '**cost**' with '**amount**'.

## Chapter 24

### Section 0

The following paragraph should be added at the start of the section:

**As part of their preparation for the assessment, candidates must demonstrate knowledge and understanding of the subject as a whole, in order to apply and produce solutions to problems relating to pensions and other benefits as follows:**

- **Analyse hypothetical examples and scenarios in relation to the financial management of pension arrangements.**
- **Propose solutions and actions that are appropriate to the given context, with justification where required.**
- **Suggest possible reasons why certain actions have been chosen.**
- **Assess the implications of actions within a given scenario.**
- **Discuss the advantages and disadvantages of suggested actions, taking into account different perspectives.**

Remove the final paragraph of Core Reading.

### Glossary

The definition of a hybrid scheme should be changed to the following:

**A scheme that offers a mixture of defined benefit and defined contribution benefits, and/or shares the risks between different parties, such as the sponsor and the beneficiaries.**

### 3 Changes to the ActEd material

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

#### Chapter 2

##### Section 6

A new Section 6 has been added as follows:

#### 6 Consultants and other advisers

Consultants and other advisers such as investment managers, accountants and auditors may be used to help ensure the scheme is appropriately managed and information is appropriately communicated to members.

#### Chapter 5

##### Section 7.5

The bullet point list starting 'A hybrid scheme offers ...' should be removed.

#### Chapter 14

##### Section 6.4

Remove 'demographic' from the title of the section.

#### Chapter 16

##### Section 1.1

Just before the third paragraph of Core Reading add:

##### ***The Actuarial Liability (AL)***

The comparison of the value of the scheme's assets with the actuarial liability (*AL*) represents an estimate of the financial health of the scheme in respect of the 'benefits earned to date'.

##### ***The Modified Contribution Rate (MCR)***

The modified contribution rate (*MCR*) is effectively the *SCR* (*ie* the 'ideal' contribution rate) modified to take account of any differences between the *AL* and the value of the scheme's assets.

After the Core Reading paragraph starting 'If there is a surplus ...', add:

Broadly speaking, for a scheme which is closed to any future accrual and is in deficit, there will be no *SCR* and the *MCR* will be just the deficit reduction contribution rate.

Remove the final two sentences of this section.

## **Chapter 20**

### **Section 1**

On page 5 change the heading to 'The amount of the benefit'. In the line leading into the bullet point list under this heading, replace 'The cost of the benefit may be linked to:' with 'The benefit amount may be linked to:'.

In the paragraph before the Question on Page 5 remove 'cost of the'.

## **Chapter 24**

### **Section 2**

Remove the third paragraph.

## **4 Changes to the X Assignments**

### **Assignment X5**

#### **Question 5**

Amend the fifth paragraph of the question to read:

A recent valuation was conducted using the Projected Unit method. It disclosed a substantial deficit of assets, compared with the actuarial liability.

### **Assignment X6**

#### **Solution 4**

The solution has been rewritten so it no longer mentions the terminology 'current cost'. Replacement pages 9 and 10 are included at the end of this document.

## 5 Other tuition services

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

### 5.1 Study material

We also offer the following study material in Subject SP4:

- Flashcards
- Sound Revision
- 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 2024 *Student Brochure*, which is available from the ActEd website at **ActEd.co.uk**.

### 5.2 Tutorials

We offer the following (face-to-face and/or online) tutorials in Subject SP4:

- a set of Regular Tutorials (three days / six half days)
- a Block (or Split Block) Tutorial (three days).

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

### 5.3 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 2024 *Student Brochure*, which is available from the ActEd website at **ActEd.co.uk**.

## 5.4 Feedback on the study material

ActEd is always pleased to receive 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 **SP4@bpp.com**.

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# 1

## Introduction

### Syllabus objectives

*There are no syllabus objectives specifically covered in this introduction. The main objective of this chapter is to give an overview of the course.*

## 0 Introduction

A sponsor operates a benefit scheme in order to provide benefits to the members of the scheme (*beneficiaries*). The sponsor's main objectives will usually be to:

- provide the benefits at an acceptable level of cost
- ensure that the form and level of benefits provided are appropriate to the needs of the beneficiaries
- provide benefits that are consistent with its other objectives (*eg* an employer may wish to provide benefits that help to recruit and retain key staff).

**The Core Reading has been produced by the Institute and Faculty of Actuaries. The Core Reading supports candidates in their learning and development of this subject by providing information and explanation of the topics and objectives in the syllabus.**

**The Core Reading is updated annually to reflect any changes to the syllabus and current practice as well as for continuous improvement. Tuition providers may use the Core Reading as a basis of their tuition services or products.**

**This version of the Core Reading is up-to-date as of 31 May 2023. The Core Reading will reference the version of any legislation, standards, professional guidance *etc* as of this date. Any known upcoming changes to the references will be noted where relevant in the Core Reading.**

**The longer term effects of the coronavirus pandemic are still uncertain. Where relevant, Core Reading has been updated to include short-term impacts, however this version of the Core Reading does not attempt to address all areas impacted by the coronavirus pandemic or any anticipated longer term impacts.**

**The United Kingdom left the European Union on 1 January 2021 without an EU-wide arrangement for the operation and regulation of financial services and this continues to be the situation. This version of the Core Reading reflects the situation as of 31 May 2023.**

**Examiners can set questions based on any area of the syllabus within any examination sitting and will consider and draw from the Core Reading when setting examination questions.**

**Candidates will be expected to apply the Core Reading to scenarios and questions proposed by the examiners. Past papers indicate to candidates how the examiners apply the Core Reading. The Examiner Reports provide further insight as to how candidates answered the questions and how marks were awarded.**

**Please read the IFoA Examinations Handbook, IFoA Qualifications Handbook and IFoA Examinations Regulations before sitting any IFoA examination. For the 2024 exams, these documents will be updated and published in the weeks leading up to each exam session, and will be available here: <https://actuaries.org.uk/qualify/>**

**A list of additional resources to support candidate learning and development for this subject can be found on the Module pages on the IFoA website: <https://actuaries.org.uk/curriculum/>**

**If a candidate is using the online version of the Core Reading, the resources are also available in the same area as the Core Reading on the IFoA Virtual Learning Environment (VLE) <https://vle.actuaries.org.uk>**

**All resources are hyperlinked to their source publication or the IFoA Library. Where a resource is available through the IFoA Library, members, students and affiliates can 'request' it from the IFoA Library Service, subject to availability.**

Further reference material is included in the last section of this chapter.

We recommend you read through the syllabus for this subject, located in the Study Guide. The syllabus objectives have a useful cross-reference to the relevant chapter(s) to support your exam preparation.

In this chapter we cover the actuarial control cycle, a process for solving problems that you may have met previously.

In order to give a high-level overview of the topics covered in the course, we have provided a chapter-by-chapter overview of the course which we hope you will find helpful.

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**Solution X6.4****(i) Two different methods***Method 1*

The DIS benefits may be valued alongside other benefits as part of the valuation. [½]

For example, the benefits can be valued as the present value of the expected death claims over the next year ... [½]

... plus expenses. [½]

As this method only looks one year ahead it is consistent with the Projected Unit method with a one-year control period ... [½]

... although other methods could still be used to value the retirement benefits. [½]

The cost is likely to be stable for a scheme with a stable age/gender/salary profile ... [½]

... however, the cost is likely to increase for a scheme with an ageing membership as the expected death claims increase with age, ... [½]

... eg a scheme closed to new members would expect to see an increase in cost each year. [½]

*Markers: give credit for any reasonable examples of how the DIS benefits may be valued alongside other benefits as part of the valuation.*

*Method 2*

The benefit can be valued as the premium currently charged for actual group life-cover. [½]

The premiums will include the insurance company's allowance for expenses and profit. [½]

These may be close to the cost in Method 1 if the market is competitive. [½]

Any change in the premium will not be under the control of the scheme ... [½]

... and will be driven by factors such as the level of competition between insurers ... [½]

... this needs to be understood by the client. [½]

As with Method 1, premiums are likely to increase if the scheme membership ages. [½]

[Maximum 6]

(ii) **Reasons for difference between the figures**

*In this question, comparison of the results of a valuation with an insurer's costing is required. Given that there are seven marks available the discussion should be wide ranging. As well as differences in the assumptions made, consider other differences too – eg differences in the benefits valued and the funding method used.*

*This question is testing material on funding methods and insurance.*

The Attained Age Method of funding was used, hence to be consistent the death-in-service benefits would have been valued using a formula of the form:

$$\frac{\text{present value of benefits to expected death}}{\text{present value of 1\% of salary to expected death}} \quad [1]$$

The average cost of benefits for the period is likely to be much higher than the cost calculated using the Projected Unit Method ... [½]

... since it assumes an ageing workforce and that the cost of death benefits increases with age. [½]

The insurance premium is likely to be the expected claims cost over the next year only ... [½]

... plus expenses. [½]

The insurance cost might be cheap due to: [½]

- competition [½]
- above average mortality in the scheme, not been reflected in the premium rates. [½]

The insurance may not relate to the whole death benefit, ... [½]

... eg may exclude spouses' pensions or be for just the excess over the past service reserve. [½]

The valuation basis may be prudent, giving a higher estimated cost, eg: [½]

- spouse's annuities based on a long-term interest rate, not the current interest rates [½]
- implicit or explicit allowance for discretionary pension increases. [½]

The insurance company may have lower expenses than the scheme. [½]

The insurance company may not cover all employees. [½]

[Maximum 7]