Subject SP2

CMP Upgrade 2024/25

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 2024 CMP to make it suitable for study for the 2025 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 2025 *Student Brochure* for more details.

We only accept the current version of assignments for marking, *ie* those published for the sessions leading to the 2025 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 2025 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 2025 exams.

Page 2 SP2: CMP Upgrade 2024/25

1 Changes to the Syllabus

There have been no changes to the syllabus objectives.

2 Changes to the Core Reading and ActEd text

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

Chapter 4

Section 1

The last two paragraphs of ActEd text on page 15 have been updated as follows:

As the reserve appears as a liability in the company's balance sheet, the expected present value of the initial expense charges will <u>reduce the liability</u>, reducing the company's capital requirement.

In the case of Example contracts 1 and 2, we could <u>allow for the future expense charges</u> in the form of a negative non-unit reserve. We return to the calculation of such a reserve in Chapter 19.

Chapter 5

Section 1

The last sentence of Core Reading in Section 1.2 has been deleted, so that the Core Reading now reads as:

The asset share can be calculated recursively on a year to year basis. Initially the earned asset share is zero. Each year the cashflows including premiums received, any miscellaneous profits to be allocated, and deductions made (as listed in Section 1.1 above) are recorded. A suitable rate of return on investments is used to accumulate the start of year asset share plus premiums less deductions plus miscellaneous profit allocations to determine the asset share at the year end.

Practice questions

Part (iii) of Question 5.3 has been deleted.

Page 4 SP2: CMP Upgrade 2024/25

Chapter 8

Section 1

The section on 'Local culture' has been updated so that the ActEd text becomes Core Reading and new ActEd text has been added. The section now reads:

Local culture

Local culture and religious beliefs can impact the propensity of consumers to purchase insurance products. For example, the extent to which products are purchased can depend on:

- the degree of trust that individuals have in financial services companies, particularly large multinational corporations
- the level of education and financial awareness, which itself depends on the extent to which education is seen as being important
- the extent to which families provide support to each other, such as during times of unemployment, ill health and old age
- the age at which children become self-supporting
- cultural attitudes towards death.

Sales of life insurance may be low in countries which have a culture of families looking after relatives in need, or where discussing death is considered taboo. On the other hand, life insurance sales can be high in countries where consumers have a high level of trust in financial services companies and consumers are well informed.

The type of contracts bought can also depend on local culture. For example the age at which children become self-supporting can affect the term chosen for term assurances.

Chapter 16

Section 3

The section on 'Distribution channel' on page 16 has been updated so that the ActEd text becomes Core Reading. The section now reads:

Distribution channel

The remuneration of the distribution channel could affect the design. For example, the low initial allocation rate of Design A might better match an initial commission structure.

Chapter 21

Section 4

The first paragraph of Core Reading in Section 4.2 has been updated as follows:

If a realistic basis is used with this method, it will produce a surrender value that represents what the contract <u>would have cost</u> the company. In the context of without-profits contracts, it enables the company to quantify how much profit to retain and hence maintain equity with continuing policyholders and any shareholders.

Chapter 30

Section 3

On page 11, the second paragraph of Core Reading in the section on 'The process' has been updated as follows:

A first-year persistency rate can be calculated as the number of contracts that survive in-force until the first policy anniversary divided by the corresponding number of contracts issued in the previous year.

Page 6 SP2: CMP Upgrade 2024/25

Changes to the X Assignments 3

Overall

There have been minor changes throughout the assignments, including changes to mark allocations.

More significant changes are listed below.

Assignment X1

A number of changes have been made to the solution of Question 1.2 on pages 3 and 4. Replacement pages are attached.

In the solution to Question 1.4, the second point under the heading 'Mortality' has been updated as follows:

This is <u>unlikely</u> to be <u>a significant risk as the contract will not be attractive to those in poor health</u>.

[½]

The second paragraph of Question 1.5 has been updated as follows:

Compare the size of the asset share for the portfolio of term assurances with the portfolio of endowment assurances after they have been in force for three years. (Hint: consider each component of the asset share for a cohort of business.) [9]

A number of changes have been made to the solution of Question 1.5. Replacement pages are attached.

Explicit mark allocations have been given for parts (a) to (c) in Question 1.7 part (i).

| | (a) | conventional without-profits | <u>[2]</u> | | |
|---|-----|------------------------------|------------|--|--|
| | (b) | unit-linked | <u>[7]</u> | | |
| | (c) | accumulating with-profits. | <u>[5]</u> | | |
| The following point has been added to the solution to Question 1.7 part (i)(b): | | | | | |
| The policyholder would be able to choose to invest in a range of funds. | | | | | |
| The following point has been added to the solution to Question 1.7 part (i)(c): | | | | | |
| The bonuses may be smoothed. | | | | | |

Assignment X3

The penultimate point in the solution to Question 3.7 part (ii) has been replaced by the following three points:

This would reduce the risk of early withdrawals ...

[½]

... but would also reduce the marketability of the product.

[½]

The company may also then be able to hold negative non-unit reserves in those two years.

[½]

Assignment X4

The first point in the solution to Question 4.1 under the heading 'Surrender values' has been corrected as follows:

Requiring policy reserves to be <u>no less</u> than any guaranteed surrender value is appropriately prudent. [½]

The last point in the solution to Question 4.1 under the heading 'Surrender values' has been split into two points as follows:

... because for a small company it could represent a significant portion of the reserves, for a large company hardly anything ... [½]

... although it is difficult to say without knowing how much a \$ is worth. [½]

The fifth point in the solution to Question 4.4 has been split into three points as follows:

Look at a recent period so the data is up to date ... [½]

... but a long enough period of time to give enough volume of data to be credible. [½]

Consider excluding data from exceptional events, eq a pandemic. [½]

Assignment X5

Part (i) of Question 5.1 has been updated as follows:

(i) Describe how the company would determine a prudent reserve to cover the cost of the guarantee using <u>a real world calibration of a stochastic model</u>. [5]

Assignment X6

The fourth point in the solution to Question 6.6 part (iii) under the heading 'Reserving' has been updated as follows:

Alternatively, if the local regulations prescribe 'choose a 0% or 100% withdrawal rate for each product class (or policy) depending on which is more prudent' (which has been used in some jurisdictions), then the whole question is immaterial.

[½]

Page 8 SP2: CMP Upgrade 2024/25

4 Changes to the Mock Exam

Overall

The most significant changes are listed below.

Question 2

The first paragraph of the question has been updated as follows:

A twenty-year without-profits endowment assurance with sum assured 75,000 payable at end of year of death, or on maturity, is issued to a policyholder aged 40. The <u>annual</u> premiums are set using the following basis:

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 SP2:

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

For further details on ActEd's study materials, please refer to the 2025 *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 SP2:

- a set of Regular Tutorials (lasting a total of three days)
- a Block (or Split Block) Tutorial (lasting three days)
- an Online Classroom.

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 2025 *Student Brochure*, which is available from the ActEd website at **ActEd.co.uk**.

Page 10 SP2: CMP Upgrade 2024/25

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 **SP2@bpp.com**.

| This would provide some protection against inflation. | | | |
|---|--|-------------|--|
| Rates o | of ceasing premiums | [½] | |
| | policies than expected cease paying premiums then this is likely to reduce profitability e of reduced charges income. | [½] | |
| The cor | mpany has no right to levy a penalty in these circumstances and so has little protection. | [½] | |
| The exa | act effect will depend on the types of charges used and how they are levied. | [½] | |
| investe | imple, a regular monthly admin fee might be taken from premiums before they are d (in which case this would be lost if premiums stopped) or by cancellation of units (in case the charges would continue to be taken). | [½] | |
| - | oblem with the cancellation approach is that it can make a significant dent in the unit fur II, 'paid-up' policies. | nds | |
| The pot premiu | tential loss from policies being made 'paid-up' is worsened here by the indexation of ms. | [½] | |
| The am | ount lost becomes more significant, particularly if Ruritanian inflation is high. | [½] | |
| Investn | nent | [½] | |
| | mpany is only indirectly affected by investment performance on the endowment, via any elated charges. | / [½] | |
| | nere is a very small additional mortality risk if unit performance is poor, because this es the sum at risk. | [½] | |
| Guaran | Guaranteed annuity rate (ie conversion terms) | | |
| | ndamental risk here is that the guaranteed terms for converting cash to income prove mous than those the company would offer on the basis of conditions when the policyholder | | |
| Specific | cally: | | |
| 1. | Investment returns assumed within the guaranteed annuity rate may be higher than those actually available at retirement. | [½] | |
| 2. | Expected future mortality at the retirement date may be lighter than that underlying the guaranteed rate. | ne [½] | |
| 3. | The actual expenses of the annuity may be higher than allowed for in the guaranteed ra | ate. [½] | |
| | The need to offer the same terms to men and women is not necessarily a significant extra risk, a all life insurance companies in Ruritania are required to offer equalised rates. | | |
| | men are more likely to select against the insurance company by exercising the option as a typically have longer life expectancy. | [½] | |

So there is a possible risk if the company somehow ends up with an unexpectedly high proportion of women at retirement. [½] There is also the possibility that women will choose to take a higher proportion of their benefits as income rather than cash, as the terms for conversion are more attractive to women. [½] Capital strain [½] There is a risk that new business volumes are higher than expected leading to additional capital [½] strain. For example the annuity rate guarantee will increase the reserving requirements. [½] However, initial reserves and solvency capital should not be too onerous as charges are reviewable ... [½] ... and new business strain could be reduced provided a suitable charging structure for initial expenses is employed. [½] So the risk that high new business volumes causes capital strain could be minimal as long as the quarantee isn't too onerous. [½] [Maximum 12] Many of the points concerning the guaranteed annuity rate could equally well have been dealt with under the headings of investment, mortality etc above. Markers should give credit for valid points whichever structure is adopted. Solution X1.3 This topic is covered in Chapter 6. (i) Additions to benefits bonus types There are three types of bonus: regular reversionary, special reversionary and terminal. [½] Regular reversionary A regular reversionary bonus is declared throughout the lifetime of a contract, usually once a year. [½] Special reversionary bonus These are 'one-off' bonuses given during the term of the contract in addition to any regular reversionary bonuses. [½] Terminal bonus Terminal bonus may be paid when a policy becomes a claim (maturity, death or sometimes surrender). [½]

[Total 2]

- (ii) Which types of bonus are suitable?
- (a) Income could be distributed by any of the types of bonus. [½]

However, if it is reasonably stable and predictable ... [½]

All study material produced by ActEd is copyright and is sold for the exclusive use of the purchaser. The copyright is owned by Institute and Faculty Education Limited, a subsidiary of the Institute and Faculty of Actuaries.

Unless prior authority is granted by ActEd, you may not hire out, lend, give out, sell, store or transmit electronically or photocopy any part of the study material.

You must take care of your study material to ensure that it is not used or copied by anybody else.

Legal action will be taken if these terms are infringed. In addition, we may seek to take disciplinary action through the Institute and Faculty of Actuaries or through your employer.

These conditions remain in force after you have finished using the course.

So the company is at risk from more new business strain if new business volumes are higher than expected. [½]

[Maximum 11]

Solution X1.5

This topic is covered in Chapter 5.

| To compare the asset shares we need to accumulate the various components of the asset shar from the start of the contracts to the end of their third year | e [½] |
|---|--------------|
| using the company's past actual experience. | [½] |
| Premiums increase the asset share. These will be larger for the endowment assurances | [½] |
| as the benefit is payable on maturity as well as death | [½] |
| and the premiums will include a loading for future bonuses | [½] |
| but will be offset slightly by the higher sum assured of the term assurances. | [½] |
| The asset share of the endowment assurances may be increased by a share of the company's profits from its without-profits business, | [½] |
| although if losses were made then these may reduce the asset share. | [½] |
| The asset share of the endowment assurances will be reduced by any surrenders of policies with the block of business. | iin [½] |
| The asset share of the endowment assurances may also be increased by withdrawal profits from other with-profits contracts outside this block of business | l [½] |
| although these could be losses early in the term of the contract, eg if a return of premium is pa as a surrender value. | aid [½] |
| The cohort asset share of the term assurances will not be adjusted for the profits on without-probusiness or lapses. | ofits [½] |
| The investment return is likely to have added more to the asset share of the endowment assurances | [½] |
| as they have a higher premium | [½] |
| and are likely to have a higher risk investment strategy, eg including some equity exposure. | [½] |
| The asset share may actually be reduced by interest when the asset share is negative, which is make the likely to be significant for the term assurances. | nore [½] |
| It is also possible that the asset share could reduce if asset prices fall. This is more likely for the endowment assurances given their riskier investment strategy. | [½] |
| Expenses reduce the asset share. The term assurances are likely to have larger initial expenses | [½] |

| as more underwriting is required due to the larger sum at risk. | [½] |
|---|-------------|
| The cost of providing death benefits is also deducted and will be larger for the term assurances as they have the higher sum assured. | s [½] |
| The asset share for with-profits policies is often reduced by transfers of profit to shareholders, but this does not apply here as the company is a mutual. | ut [½] |
| The asset share may be reduced due to the cost of any capital required to support the contracts in the early years. This is likely to be higher for the term assurances | in [½] |
| as they have a smaller premium, higher initial expenses | [½] |
| and more onerous reserves as the benefits are guaranteed, whereas the endowment assurance have an element of discretionary benefits. | es [½] |
| The asset share of the endowment assurances may be reduced by any contribution to the free assets to support smoothing and investment freedom | [½] |
| but this will not apply to the term assurances as they are without-profits. | [½] |
| The asset share of both portfolios could be reduced by tax | [½] |
| and this could be more significant for the endowment assurances if tax is paid on investment returns. | [½] |
| In conclusion, the asset share is likely to be much larger for the endowment assurances than the term assurances at the end of the third year. [Maximur] | [½] m 9] |
| Solution X1.6 | |
| Term assurances are covered in Chapter 2. | |
| The main issues are: | |
| Anti-selection | |
| The anti-selection risk is probably greater on contract A. | [½] |
| The individuals have choice over whether to seek cover and therefore some applications from lives in poor health are likely. | [1] |
| However, the insurer is making considerable efforts to counteract this risk and may be largely successful. | [½] |
| The compulsory nature of contract B removes most anti-selection risk. | [½] |
| However, the total absence of underwriting could open the insurer to an anti-selection risk. | [½] |