

Subject ST9

CMP Upgrade 2016/17

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 2016 CMP to make it suitable for study for the 2017 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 2017 *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, Question and Answer Bank and Series X Assignments that will make them suitable for study for the 2017 exams.

0 Changes to the Syllabus objectives

This section contains all the changes to the Syllabus objectives.

The ST9 Accreditation has a new note regarding the new edition of Sweeting:

It is anticipated that a second edition of Financial Enterprise Risk Management will be published during 2016, which contains updated and additional relevant material. Students can choose to use either the 2011 edition or the second edition of this textbook for the 2017 exams, the intention being to move to the second edition only for the 2018 exams. The main chapter and section references given in the Core Reading are based on the 2011 edition, and indication is also given of where these references differ for the second edition. The examination will not assume knowledge of detail that is included in one edition but not the other.

In syllabus item 3.2.1, “**environmental risk**” is added to the list of risk categories.

1 **Changes to the Core Reading**

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

The Core Reading includes updated references to the new edition of Sweeting. As those using this Upgrade document will have the first edition of Sweeting and the second edition is yet to be finalised (as at May 2016) these have not been included in this document.

Module 3

Section 2

A new paragraph regarding the new risk listed in syllabus item 3.2.1 has been added:

Environmental risk covers risks relating to the natural environment and human interactions with it. It therefore includes a wide range of drivers, from natural disasters and climate change to pollution and the impact of declining natural resources.

Module 5

Section 1.4

A new section regarding the regulation of UK insurers has been added:

Senior Insurance Managers Regime

The UK financial services regulators introduced a Senior Insurance Managers Regime (SIMR) at the start of 2016. This regime brought together a number of rules (including Solvency II requirements – see later in this module) to ensure that individuals who run insurance companies have clearly defined responsibilities and behave with integrity, honesty and skill.

There are two main parts to the SIMR.

1. the development of a governance map giving details of:
 - the company and corporate governance structures
 - identified “Key Functions” (including the Risk Management Function), “Key Function Holders” who are ultimately accountable for these functions and “Key Function Performers” who support the Key Function Holder in the execution of their duties

- all individuals included within the SIMR regime, their responsibilities and reporting lines
 - the rationale applied in identifying those individuals and allocating responsibilities to them.
2. the requirement to carry out an assessment of fitness and propriety of senior insurance managers and directors, based on their responsibilities as allocated through the governance map. Of particular note is the inclusion of the Chief Risk Officer and the Chair of the Risk Committee.

Module 5

Section 3

In the introduction, the Core Reading is updated to note that Solvency II was implemented on 1 January 2016.

Module 13

Section 4.2 and 4.3

The bullet point “cyber risk” in Section 4.2 has been expanded to read:

- **rapid changes in the nature and sources of cyber risk, including increased threats to data security**

New Core Reading has been added to Section 4.3:

Cyber risk

Cyber risk is a notable example of a risk which can be considered to be “emerging” in terms of having rapidly changing characteristics.

It is defined by the Institute of Risk Management as “any risk of financial loss, disruption or damage to the reputation of an organisation from some sort of failure of its information technology systems”.

This typically is connected to online activity, internet trading, technological networks and the storage of personal data. Risks include hacking, security breaches, espionage, data theft, extortion, privacy breaches and cyber terrorism.

The implications can include business interruption, reputational damage and legal liability, with associated costs of communications, resolution, compensation, loss of business and possibly fines and legal costs. There may also be infrastructure threats and risks to the physical safety of individuals.

Although it is now a well recognised risk area, the nature and source of cyber attacks and exposures is constantly changing, and typically under-reported, and hence difficult to monitor and manage.

Controls include having strong IT security, including firewalls and malware protection, clear policies and governance for users, and incident management processes. Regular review is essential and there is benefit in information sharing and collaboration across entities (eg the EU Cyber Security Directive).

It may be possible to purchase cyber insurance to cover losses relating to damage to, or loss of information from, IT systems and networks – such losses may be excluded from general liability insurance coverage.

Cyber insurance may for example cover:

- loss of or damage to digital assets
- business interruption
- legal defence and damages costs
- required communications to customers
- reputational damage
- third party losses (eg customers)

The insurance company may also provide expertise and assistance in managing the incident.

Module 15

Page 9

“**Environmental risk**” is added to the list of “Other risk types”.

Module 26

Page 11

“**Rejection**” is added as an alternative expression for “**avoidance**”.

Module 33

Cyber risk and environmental risk are added to the list of principal terms.

Cyber risk

Cyber risk relates to the failure of information technology systems, typically where there is online activity and / or the storage of personal data, such as due to security breaches or targeted attacks.

Environmental risk

This covers risks relating to the natural environment and human interactions with it. It therefore includes a wide range of drivers, from natural disasters and climate change to pollution and the impact of declining natural resources.

2 **Changes to the ActEd Course Notes**

This section contains additional *significant* changes to the ActEd Course Notes. However, if you wish to have all the changes to the ActEd Course Notes, you will need to buy a full set of the up-to-date version (which you can do at a significantly reduced price if you have previously bought the full-price Course Notes / CMP in this subject).

Module 3

A new section has been inserted in respect of the new syllabus item on environmental risk.

The bullet points on environmental risk in the final section “Other risks” has been merged in with the new Core Reading definition.

Subsequent sections have been renumbered.

Module 5

Section 2.4

The new Core Reading listed in Section 1 (above) of this upgrade document has been added.

Module 9

Page 7

The notes for the quadratic utility function have been corrected to say it exhibits increasing relative risk aversion (*ie* delete “constant” and replace with “relative”):

quadratic	$u(W) = \alpha W - \frac{1}{2} W^2$	<ul style="list-style-type: none"> • maximise expected wealth subject to volatility • increasing absolute and relative risk aversion, <i>ie</i> $a(W)$ and $r(W)$ increase with W
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Module 13

Section 4.3

The new Core Reading listed in Section 1 (above) of this upgrade document has been added.

3 **Changes to the Q&A Bank**

Other than the minor corrections listed below, there have been no significant changes to the Q&A Bank.

Q&A 3.2

In the question part (ii), X should be given as $X \sim \text{Gamma}(\beta = 0.05, \gamma = 5)$.

Q&A 3.24 Solution

The numerator of the second line in the derivation of coefficient of lower tail dependence should be a joint (not a conditional probability), *ie*:

$$\begin{aligned} {}_L\lambda &= \lim_{z \rightarrow -\infty} P(Y < z | X < z) \\ &= \lim_{z \rightarrow -\infty} \frac{P(Y < z, X < z)}{P(X < z)} \\ &= \lim_{z \rightarrow -\infty} \frac{F(Z, Z)}{F(Z)} \end{aligned}$$

4 *Changes to the X Assignments*

There have been no significant changes to the X Assignments.

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 ST9:

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

For further details on ActEd's study materials, please refer to the 2017 *Student Brochure*, which is available from the ActEd website at **www.ActEd.co.uk**.

5.2 Tutorials

We offer the following tutorials in Subject ST9:

- a set of Regular Tutorials (lasting three full days)
- a Block Tutorial (lasting three full days)
- a Revision Day (lasting one day).

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**.

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 2017 *Student Brochure*, which is available from the ActEd website at **www.ActEd.co.uk**.

5.4 *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 **ST9@bpp.com**.