Subject CM2

Corrections to 2022 study material

0 Introduction

This document contains details of any errors and ambiguities that have been brought to our attention in the Subject CM2 study materials for the 2022 exams. We will incorporate these changes into the study material each year. We are always happy to receive feedback from students, particularly details concerning any errors, contradictions or unclear statements in the courses. If you have any such comments on this course please email them to CM2@bpp.com.

You may also find it useful to refer to the Subject CM2 threads on the ActEd Discussion Forum. (You can reach the Forums by clicking on the 'Discussion Forums' button at the top of the ActEd homepage, or by going to **www.acted.co.uk/forums/**.)

This document was last updated on **21 February 2022**.

1 Assignments

Assignment X2 Solutions

Question 2.6(ii) ***(added on 21 February 2022)***

The number of marks available in the solution should read "[Maximum 3]" rather than "[Total 5]".

2 Mocks

Mock 1

Question 8

There was a numerical error in part (i), which affected the rest of this question. In the line:

$$\sigma=\sqrt{\left(\frac{12}{17}\right)^2\times 20^2+\left(\frac{5}{17}\right)^2\times 40^2}=16.9673\%$$

the answer should be 18.3771%.

Part (i) of the question should read:

(i) Show that the equation of the efficient frontier in $E-\sigma$ space is:

$$\sigma=5.1215\left(E-3\right)$$

The solution to part (i) from this point should read:

$$\sigma=\sqrt{\left(\frac{12}{17}\right)^2\times 20^2+\left(\frac{5}{17}\right)^2\times 40^2}=18.3771\%$$

So, the efficient frontier will be a straight line passing through the points $\left(3,0\right)$ and $\left(6.5882,18.3771\right)$ in $E-\sigma$ space.

Therefore, the equation of the efficient frontier is:

$$\sigma=\left(E-3\right)\times\frac{18.3771}{6.5882-3}=5.1215\left(E-3\right)$$

The solution to part (iii) should have '5.1215' in place of '4.27286' and should read:

$$\sigma=5.1215\left(E-3\right)=\sqrt{10\left(E-0.1E^2-k\right)}\qquad(1)$$

Differentiating the equation of the efficient frontier gives:

$$d\sigma/dE=5.1215$$

Differentiating the equation of the investor's indifference curves gives:

$$\sigma=\frac{10-2E^2}{\sqrt{10\left(E-0.1E^2-k\right)}}$$

Setting these gradients equal:

$$5.1215 = \frac{10 - 2E^2}{\sqrt{10\left(E - 0.1E^2 - k\right)}} \qquad (2)$$

Equations (1) and (2) would need to be solved to eliminate k and find the value of E, which could then be substituted back into $\sigma = 5.1215\left(E - 3\right)$ in order to calculate σ.