Subject CS1

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 CS1 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 CS1@bpp.com

You may also find it useful to refer to the Subject CS1 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 **20 April 2022**.

1 Paper A Course Notes

Chapter 9

Page 8 ***(added on 7 October 2021)***

The question should say:

Calculate a symmetrical 99% prediction interval for the IQ of a single university student and not the average IQ of university students.

Chapter 11

Page 19 ***(added on 9 September 2021)***

In the solution, the probability equation should read:

$$P(W > 1.9239) = P\left(Z > \frac{1.9239 - 1.4722}{0.37796}\right) = P(Z > 1.195) \approx 0.12$$

2 X assignments

Assignment X1

Solution X1.12 (ii) ***(added on 2 February 2022)***

There is a typo in the calculation of the coefficient of skewness. The denominator should be $520,000^{1.5}$ and not $502,000,000^{1.5}$. The final answer of 0.150 is correct though.

3 Y assignments

Assignment Y2

Solution Y2.2 (ii)(a) ***(added on 9 February 2022)***

There is an error in the code constructing `yvals` in the PDF document. The code in the R file is correct, as are the graphs in the PDF. The code in the PDF should be:

```
yvals <- dnorm(xvals,pmean,sqrt(pvar))
```

4 Mock exams

Mock Exam 3, Paper A – Questions

Question 8 (i) ***(added on 20 April 2022)***

There is a typo in Option C. It should read:

C $b(\theta_i) = \ln(1 + e^{\theta_i})$

Mock Exam 3, Paper A – Solutions

Question 8 (i) ***(added on 20 April 2022)***

There is a missing negative sign in front of the second 'ln' term. It should read:

$$b(\theta_i) = -\ln(1 - p_i) = -\ln\left(1 - \frac{e^{\theta_i}}{1 + e^{\theta_i}}\right) = \ln\left(1 + e^{\theta_i}\right)$$