

STEP II, 2014, Q5 EC

Question 5

This was the most popular question on the paper and the question which had the highest average score. Most candidates correctly solved the differential equation in the first part of the question, but many then calculated the constant term incorrectly. In the second part of the question most candidates were able to find the appropriate values of a and b , but then did not see how to apply the result from part (i) and so did the integration again or just copied the answer from the first part. Some candidates again struggled to obtain the correct constant for the integration and others did not substitute the correct values for the point on the curve (taking (X, Y) as $(1,1)$ rather than (x, y)).



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