Section A: Pure Mathematics

1.   This question was popular. Many candidates did not simplify their first expression into the symmetrical form which made it harder for them to spot the use of the sums and products of roots results. A common slip was to make a 1 by default which also obscured what was going on. Most struggled to take the given equation requiring solution and produce a quartic equation in t ($\tan\vartheta$), some producing a quartic equation in $\cos\vartheta$, and somehow expecting to use the earlier results.

2.   This question was popular though not well answered. Solutions to part (i) were frequently unconvincing, though to part (ii) were quite good if they avoided elementary errors in working. Part (iii) was less well attempted with some not spotting to use integration, some stumbling over "+ c" and some not spotting the value of x to substitute.

3.   This question was popular. Many solutions to part (ii) were rambling and lacked a sense of direction, even if correct. The induction in (iii) was frequently incorrectly handled and a common error was to replace *n* by *k*/2. Part (iv) caused difficulties.

4.   This question was quite popular. A lot of attempts involved rambling trigonometrical manipulations, and few spotted the standard differential of $\ln\tan\dfrac{t}{2}$. The curve sketch was often omitted or incorrect, and there was a lot of complicated working using e.g. the equation of the normal etc. to find the centre of curvature.

5.   This was frequently attempted, though lack of facility with hyperbolic functions meant that few progressed beyond the first two differentials, and for those going further, the working was not methodical enough to spot the factorial that would emerge in the general result.

6.   This was the least popular Pure question and very little success was achieved by the few that attempted it. The first result was often obtained correctly by expressing each of the four complex numbers in modulus-exponential form, but then the perpendicularity was the stumbling block.

7.   This was a very popular question. As the question led the candidates through there were a number of unconvincing solutions to parts of the question, but overall it was reasonably well handled.

8.   This ranked alongside question 5 in popularity and success. Frequently, it was calculation errors that obscured the path through part (i) and the two differences between part (i) and part (ii) were enough to put most off the track for part (ii), even if they had completed (i) successfully.

Section B: Mechanics

9.   This was little attempted. Some did struggle through to the solution of the differential equation, but the appreciation of the three possible cases eluded them.

10.   This was the most popular of the Mechanics questions, but less so than any but question 6 of the Pure. Most managed to obtain the first two results correctly, but then struggled to find the further result. The deduction for the largest R was rarely spotted leading to some unnecessarily unwieldy calculus.

11.   There were very few attempts at this question.

Section C: Probability and Statistics

12.   There were some attempts at this question but they faltered when trying to find the expectation of *Y*, even though some may have believed that they had obtained the required result through false logic.

13.   This was the most popular of the Probability and Statistics questions, ranking alongside questions 5 and 8. The first two parts were competently handled, but most got bogged down in the algebra of part (iii) through not having a clear strategy to solve the equations.

14.   There were few answers of any substance to this question.