

## Informal Feedback on the ME20021 Examination (May 2017)

In general, my part of the paper (Q3 and Q4) was well done. Very unusually Q4 attracted very high marks for those who attempted it although almost everyone answered Q3; usually the marks are higher for Q3.

Very very pleased with the uptake of the old integration by parts method. Very very few went astray on that. Nice work.

### Question 3.

**Part (a).** Generally this was answered well in terms of obtaining the correct summation. The constant term was sometimes justified but often not — it was just added in at the very end with no justification whereas I did need some justification.

**Part (b).** Also done very well. There a few incorrect values of  $A_0$ , and sometimes incorrect limits were used or the integral was multiplied by 2, but these were mercifully rare.

**Part (c).** In all my years of exam-setting I have never had such an appallingly bad answer to a part of a question. Perhaps only about 20 students out of the class of 265 got this right. The initial temperature profile was  $\theta = x$ , a straight line, whereas about 245 of the class drew a parabola as the initial condition and attempted to reproduce Fig. 2.4 from my online notes. Clearly I have done something strange to have caused over 90% of the class to go astray...

**Part (d).** Generally quite well done. There were quite a few who used strange terminology to try to describe the physical meaning of  $A_0/2$ .

**Question 4.** This one was taken from an old exam paper and there a large number of people with full marks.

**Part (a).** Bookwork. I warned everyone, and almost everyone did this perfectly .

**Part (b).** This was a classic integral. Perhaps that is why this part was answered quite well.

**Part (c).** The well-trodden path was trodden well once more. Nice work.

**CONCLUSION:** I will need to consider making at least one of my questions a little more difficult next.

