Overall students did very well in questions 1, 3 and 4.

Few points that are worth mentioning:

Question 3

(3.a) Some students did not realise that the k-means algorithm will NOT cluster correctly the data even if you use k=3.

(3.b) Some students did NOT justify their choice of alternative algorithm and/or did not explain why it works better.

Question 4

(4.d) Few students, although they noted the 'need' to find corresponding points in the two images, they DID NOT give details as to HOW such corresponding points can be found/chosen/matched. They should have named a method and briefly described it.

Carole Twining feedback:

Question 2:
Part a): The main failure here was people not explaining clearly WHY alignment was needed, and then not giving sufficient algorithmic detail as to how it could be done. The question did ask for detail, so I was looking for exactly what was optimised, and WRT what, for example. All terms used needed to be defined as well. There were some good answers to this, however.

Part b): As with part a), marks were lost because insufficient detail was provided. And even if mathematical detail was provided, I was still looking for some words as to WHY this particular mathematical construction was USEFUL. Some key words/concepts needed to be mentioned here. There were some good answers, but many people provided either maths, but not usage, or usage but not enough precise detail (maths or diagrams). So, both HOW and WHY were needed here for full marks.

Part c): As with the previous parts, the main failure here was lack of detail, and not providing ALL the parts of the search or construction process. Remembering the diagrams from the lectures would have helped here, but few people did so and instead tried to explain the same concepts using words, which was not always successful. Also, most people wrote far too little here – give that this part was ten marks, a substantial answer was required for good marks. Short answers, unless people were VERY precise, often did not contain enough points to get many marks.

Question 5: There were very few attempts at this question. But it wasn’t really as hard as many people seemed to think, and there were some very good answers to this question.