

## Examiners report

### Trading Standards Qualification Framework

#### DCATS: Legal Metrology Practical Examiners' Report November 2017

##### General

This sitting continued the new format introduced three years ago and was a mix of 2 purely practical questions and 2 scenario based desk top exercises. The choice of questions reflected the advice put out about potential questions by CTSI in 2015. There was a mix in the metrological experience of candidates in how the questions were answered, those who have been involved in metrology clearly had no problems in completing the questions to a good standard. Conversely, those candidates who have had little experience did poorly. There also seemed to be a disconnect by some candidates with the metrology portfolio as it was clear that they were unfamiliar with the equipment or testing which was a surprise. A common theme with some candidates was poor numeracy skills which is a basic requirement for a metrologist. There were also too many answers that contained "crown stamp"; these questions were on MID and NAWI and initial verifications so need to be undertaken by a Notified Body. The nationally approved test forms seemed alien to some candidates. Ensure when practicing for your exam that you have seen and understand the requirements under MID and NAWI.

##### NAWI Question

Generally answered satisfactorily, the poor answers were in main due to an inability to determine the errors that needed to be manipulated. As this is a common task for an inspector it is a surprise that this isn't second nature. What was pleasing was that more candidates are aware of the role and importance of software and its protection in the metrology realm.

##### AGFI Question

A mixed range of abilities answered this question, it highlights what little experience is offered to candidates in the field of automatic weighing instruments. It was clear from the answers who had tackled them correctly within the portfolio. The astute candidates recognised that as this was a desktop exercise some of the answers involved understanding the Type Approval Certificate as the answers were there. Again, numeracy plagued some answers in determining errors for MPD and MPSE.

##### LFMI Question

Generally answered satisfactorily although most candidates missed the fact that the errors in some circumstances were within tolerance but quite a way from strike; so in essence were not "reasonably close to strike as practicable" therefore not acceptable. This identifies that experience in verifying this type of equipment is needed.

##### MCB Question

Essentially a straight forward question, one of the portfolio tasks, with a clear methodology. Unfortunately, it wasn't answered particularly well and was one of the lowest scoring questions.

Candidates did not detail what the test was and the methodology used, leaving a jumble of numbers on the page without an explanation of what they were or where they came from.

### **PGR Question**

This question has been a staple over the years and the answers belie the fact that candidates are not seeing packing lines as often as perhaps they need to. Those that do rely upon software to undertake the tests without an understanding of the test requirements. This question was set using a volumetric product and yet some answers were presented in grams. Another worrying aspect was that some candidates did not understand the relationship between density, mass and volume and this was evident in their answers. Again, methodology was not presented so it was unclear where numbers were derived from.

### **Volumetric Flask Question**

Another staple question over the years and generally answered well by those who provided a clear methodology and had an understanding of how to minimise errors in the calibration. Some candidates may benefit from relearning BODMAS when applying the formula to determine the corrected volume. Only two candidates reported that the room was exactly 20 degrees and the water was exactly 20 degrees this sitting. The invigilators do make a note of the temperatures be aware; this year it was averaging 21.4 degrees so corrections do need to be applied!