

Examiner's report

CTSI Professional Competency Framework

Stage 2: Weights and Measures Written Examiner's Report May 2022

General

This cycle of the examination was taught entirely on-line and was very challenging for candidates, many who had no experience of legal metrology at all. Most of the candidates worked very hard and managed to learn a vast amount of information in a short- time and began to grasp some of the principles of legal metrology, however the examiner remains sceptical at the degree of understanding of many of these candidates and how effective they would be at applying the knowledge. Local authority heads of service must take responsibility for ensuring their staff have the appropriate support and practical experience to become effective officers.

There are four points to note from this year's examination.

- 1) The marking scheme allows marks to be awarded for the use of specific terms and phrases, when this is combined with a pass mark of only 40% it is relatively easy for candidates to gain sufficient marks to pass the exam without demonstrating a comprehensive understanding of the subject matter being examined. This point has been noted in successive examiners reports
- 2) There is a clear difference between the candidates that have worked very hard to understand the subject and those who have not been able to devote sufficient time to the exam.
- 3) It is the view of the examiner that a fundamental review of regarding the delivery of the practical training must be undertaken with the aim of encouraging more people to become qualified as an Inspector of Weights and Measures.
- 4) There will be an even greater challenge with regard to future cohorts as the examination will cover the legislative changes as a result of the UK's departure from the European Union. This has made legal metrology legislation particularly complicated.

Section A

Q1

This question was answered reasonably well. Most candidates did not sufficiently explain what a normative document is and many cited OIML R111 which is not a normative document.

Q2

Very few candidates attempted this question and the majority of those that did gave very poor answers. This is surprising because it is simply a case of outlining the definitions in the Measuring Instruments Regulations 2016. This led the examiner to believe that very few candidates had looked at the regulations.

Q3

This question was answered by several candidates and the majority did not give an answer that instilled confidence. It was important to understand the relationship with Part 1 of the Weights and Measures Act, Schedule 1, and schedule 3, the relevant regulations and the 7000 series of specifications. Most candidates offered rote answers which earned sufficient marks.

Q4

This question was testing an understanding of the differences in the responsibilities of different economic actors and the authority to undertake initial verification and re-verification of weighing and measuring instruments. This is a complicated and confusing area and those candidates that have taken the trouble to understand this subject scored well. It appears as a question in some form every year.

Q5

This question was testing whether candidates understood the legislation relating to capacity serving measures, the significance of conformity assessment marks and the influence of BREXIT. Although this subject was considered on numerous occasions during the training most candidates did not understand this relationship. It is important that candidates do understand this, and it will appear in future questions.

Q6

If candidates had read the Packaged Goods Regulations in detail this was an easy question. Most candidates who did this question were able to recite a lot of detail about the Packaged Goods Regulations but very few answered the question. Most candidates gained sufficient marks to pass.

Section B

The questions in Section B are 35-mark questions and the level of detail should reflect this.

Q7

If candidates had done sufficient work this was an easy question. Most candidates scored full marks on this. If candidates had done sufficient work this was an easy question. Most candidates scored full marks on this. It was gaining good marks on 7(a) and 7(b) that managed to get many candidates a sufficient mark to pass the exam. This question was poorly answered. All candidates must become more confident with understanding the role of software in legal metrology. This is a fundamental part of legal metrology that future inspectors must understand. Some answers were dreadful, some were excellent.

This will occur in some form in all exams and candidates must understand the EN45501 standard and clause 8.3 and how to use it. This question was testing candidates understanding of the relationship with type examination certificates and changes to weighing instruments. Some candidates scored well. The modular approach is an important element of understanding and appears regularly in exam questions

Q8

This was an easy question that offered those candidates that had done sufficient work regarding the Packaged Goods Regulations an opportunity to gain high marks. Most candidates did not thoroughly understand the implications of importing packages into the GB post BREXIT. Questions about the implications of BREXIT will continue to be the basis of future exam questions.

Q9

This question was testing whether candidates understood the difference between their work as an approved body and a local weights and measures authority. This is an important distinction which candidates must understand. Those candidates that had done sufficient work understood this difference. This question was testing whether candidates had read and understood the essential requirements relating to the location of a verification.

It also examined the understanding of the modular approach and how this interacted with the verification of weighing instruments. This question was ensuring that candidates understood that there is a wide range of requirements that relate to weighing and measuring instruments and that an understanding of all of them is relevant to ensuring compliance. It also tests an understanding of the different modules (routes to compliance) and the responsibilities of manufacturers about this. This question was testing that candidates had read the various guidance notes that are crucial in understanding the transition dates that relate to BREXIT changes.

Whilst accepting that this is a complicated area to understand it became apparent that there was a limited understanding of the different dates. The answers to this question were variable, but it was clear that many candidates had learnt the listed characteristics of type U software and scored good marks. Questions relating to software appear in some form or another in every exam paper and should be understood. This question was testing that an inspector would know which marks that would need to be applied after a verification had been completed. It also required an understanding of under what circumstances the UKCA mark should be applied

Q10

This question of understanding how a liquid fuel measuring instruments operates is fundamental to the understanding of a weights and measures inspector. Most candidates answered the question well and scored high marks which was important for compensating those questions where they scored less well.

This question was testing whether the candidate understood the difference between the 1995 Liquid Fuel Measuring Instruments Regulations and the 2016 Measuring Instruments Regulations. Understanding the applicable regulations in any given scenario is very important in understanding the requirements that relate to the instrument. This question tested whether candidates understood the requirements for the testing of liquid fuel measuring instruments.

If candidates had read and understood these regulations, they scored well. The lack of practical experiences of many candidates shone through in the marks received. This question was testing whether candidates understood the modular approach in relation to software. This is an increasingly important part of legal metrology and must be better understood by all candidates.