



## Stage 2: Weights and Measures Written Report September 2022

### General

This was the September paper for Weights and Measures exam under S73 of the Weights and Measures Act 1985. There was only one candidate.

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 the requisite understanding of the subject matter being examined. This point has been noted in successive examiners reports.

### Section A

#### Q1



arises in different forms each year and the candidate must be aware of how to undertake this. The candidate should note the number of marks awarded to the question as this will reflect the amount of detail necessary.

### Q8

You are approached by a local farmer who intends to undertake contract farming for other local farms. He explains he plans to charge his customers by the hour for the work completed and by the litre for the volume of fuel used. The charge for the fuel will be determined by an old liquid fuel measuring instrument at his farm that he has used to fill up his own vehicles. He invites you to the farm to discuss the proposal and to look at the liquid fuel measuring instrument. You notice the instrument is not networked to any other devices. The instrument has a data plate which shows the date of manufacture as 2008 it bears a CE mark and M mark and other relevant markings but no conformity assessment markings.

(a) What advice would you give the farmer about using the liquid fuel measuring instrument to determine how much to charge his customers

The candidate will be expected to note that as the farmer intends to sell the fuel to his customers and use the petrol pump to determine that quantity it will be in use for trade as defined in section 7 of the Weights and Measures Act. It must therefore be approved and verified. The candidate will also be expected to note that when the instrument is verified it will be a new instrument and must comply with all requirements when it is placed on the market which may be problematic

(b) The farmer enquires whether he must sell the fuel quantity. What advice would you give him?

This question is testing whether the candidate understands that a weighing or measuring instrument does not have to be used to determine a transaction, but if it is used it must be approved and verified. This means that the farmer could incorporate the cost of the fuel into the total contract cost if the fuel element was not based on quantity.

## Q9

You work for a local authority approved body and have been approached by a local business in your area that would like to place material measures of length on the market in the UK. He has manufactured material measures of length previously in 2012 and he still has a number of these available to be sold in his factory shop. These bear a CE mark, an M mark, and a notified body number. He would also like to import instruments from France next year that have not undergone a conformity assessment procedure and do not bear any metrology conformity assessment marks. He would like advice on what steps he should take to enable him to supply these instruments in the UK under the Measuring Instruments

(a) Can they legally supply the instruments he has in the store in the UK. Explain your reasons?

This question focuses on testing whether the candidate understands the concepts of placing on the market and putting into service and the effect that this will have in the context of the transition to UKCA marks

(b) What advice would you give them with regarding the conformity assessment procedures necessary to place the newly manufactured measures on the market in the GB and who should carry those out

This question is testing the candidates understanding of the conformity assessment modules that apply to material measures of length. There have been many questions regarding the different types of conformity assessment modules that apply to different instruments and candidates should be comfortable with these

(c) What is the significance of the OIML Document R35? Explain the three categories error that must be applied? Briefly explain how you would undertake a verification

OIML R35 is the normative document relating to material measures of length. The three categories of error and the method of test can be found in OIML R35

(d) Can the material measure of length be conformity assessed in both metric and imperial units for the GB market? Briefly explain your answer.

This question is testing candidates understanding of the legislation as it relates to units of measurement and weighing instruments. It involves a knowledge of the Units of Measurement Regulations 1986, the Essential Requirements of the Non-automatic Weighing Instruments Regulations 2016, and section 8 of the Weights and Measures Act 1985 and schedule 1 and 3 of that Act and understanding how these interact together

(e) A local veterinary practice would like to purchase a material measure of length marked in hands. Is this possible?

This is a question testing an understanding of section 7 and schedules 1 and 3 of the Weights and Measures Act 1985 and the use of imperial units

## Q10

This question is asking the candidate to briefly outline the requirements of the Packaged Goods Regulations 2006. It is very important that candidates understand the Packaged Goods Regulations as there is a question on one form or another every year

a) What is a measuring container bottle?

The definition of a measuring container bottle is in the Regulations 76/211. If the candidate knows this definition, they should get full marks for this answer

b) What is standard temperature accounting? They would like you to explain what guidance is available on this matter. Outline briefly to them how you would inspect a liquid fuel measuring instrument that utilizes standard temperature accounting marks

The answer to the question lies in the Guidance notes issued by OPS&S (STA Guidance (V13) and the practical implications

(c) They asked which WELMEC Guide relates to the control of software in weighing and measuring equipment? Explain the structure of the Guide that relates to instruments under the Measuring Instruments Regulations 2016 and briefly explain what software identification that you would expect to find on a liquid fuel measuring instrument