#### CHARTERED INSTITUE OF LOGISTICS AND TRANSPORT IN IRELAND

#### PRINCIPAL MARKER'S REPORT FORM

## DANGEROUS GOODS SAFETY ADVISER EXAMINATION

## PART TWO - COMMENTS MAY BE CIRCULATED

No Attempting Examination:	51
No Passing Examination:	44
% Pass Rate:	86.22%
Average Mark	39.51

#### **A.** General Comments

- This was the first diet of exams to be based on the new examination system based on a twopaper diet only. The results are pleasing though many candidates made the same errors throughout the paper. Congratulations to the one person who scored 100%.
- The results compare reasonably well with, say, typical pass rates and average marks that would have been achieved on the previous ALL CLASSES type papers from the old three exam regime.
- Candidates are reminded again that marks and labels in dangerous goods terminology are different and that they should use the correct term when describing marks and labels in their solutions. The sign for Limited Quantities, for example, is a "mark" and not a "label".

#### **B.** Comments on Individual Questions

# Please make comments as appropriate for each question.

Q1. This was a two-part question concerning the classification of a pesticide in solid and liquid form. Most candidates worked out in the first part that a Class 6.1 Packing Group II dermal rabbit LD<sub>50</sub> datum takes precedence over a Class 6.1 Packing Group III oral rat LD<sub>50</sub> datum. However, I wanted candidates to justify this decision from the text of the ADR and not just intuitively. Paragraph 2.2.61.1.7.1 provides the instructions on how to deal with this sort of situation and was an important part of the references needed for part (a) of this question. 29% of candidates failed to mention this reference.

In the second part, the pesticide had been dissolved in a solvent with certain flashpoint and boiling point temperatures. It was said that the toxicity had not changed by making the formulation. Most worked out correctly the class and packing group based on these two data, i.e. Class 3, Packing Group II and also worked out using the Table of Precedence which danger took precedence. Some thought that the flammable liquid data lead to Packing Group I, however (14%). A few could not do part (b).

Q2. This question was in two parts and concerned the Limited Quantities provisions. In the first 1 of 4

part, candidates had to work out the limit for the capacity of the inner packagings for the substance concerned (1 litre). Most got this bit right. Candidates were expected to know and say that the boxes containing the substance must not exceed the maximum permitted gross mass of 30kg. 17.5% of candidates did not do this.

In the second part, candidates were asked to say how the boxes should be marked and if necessary to be labelled for transport. Here I remind candidates that the use of the term "mark" and the term "label" are quite precise in usage in the ADR and should not be mixed up. The Limited Quantities sign, for example, is a mark and not a label. 12% did not say positively that no dangerous goods labels were required on the package. As far as the Limited Quantities mark is concerned, candidates were asked to give the standard dimensions for it. 16% of candidates did not give the two salient dimensions.

More significantly as the substance in the question was a liquid, this meant that two doublearrow orientation marks were needed on the boxes. 25% of candidates did not state this.

Q3. This was a three-part question which started out in part a) with a question on the mixed packing provisions (MP). It was well answered on the whole, most candidates working out that six inner packagings were required.

The second part asked candidates to say what additional condition should be taken into account when doing the mixed packing. I needed the answer which is in all relevant MPs "provided they do not react dangerously with each other". 25% of candidates gave some other answer considering this is an important safety issue.

In the third part candidates were asked to say what marks and labels were required on the mixed packed boxes taking into account that one of the substances was considered to be dangerous for the aquatic environment (environmentally hazardous). A few candidates missed out one or both of the required labels from their answers. More significantly 21% of candidates overlooked that the double-arrow orientation marks were required on two opposite sides once more.

Q4. Whilst this was a five-part question on Limited Quantities, its primary aim was to explore other aspects of the Limited Quantities rules. In part one, candidates were asked to give the class and classification code for the aerosol's cans concerned. Most got this right though a few gave just "5" or the letter of the classification code when both the number and the letter were required.

In the second part, candidates were asked to give the two quantity limits which allowed the aerosols to be transported in as Limited Quantities i.e. no more than 1000 ml (1 litre) for the cans and that trays with these in should not weigh more than 20 kg. 23% of candidates gave the wrong limit for the gross mass, i.e. 30kg which is when packed in boxes.

The third part, on what marks and labels if any were required on the shrink-wrapped trays was largely well answered.

Now I come to the fourth and fifth parts. Vehicles laden with 8 tonnes or more of Limited Quantities and no other dangerous goods must be marked at the front and rear with enlarged

versions of the Limited Quantities mark, 250 mm x 250 mm. Nothing more is required. No less than 37% of candidates missed this and started to tell me all about orange plates which are not needed in such circumstances. A few more wanted No. 2.2 placards on the vehicle – also not necessary while one person thought overpack rules applied. See 3.4.13 of ADR.

In the final part, candidates were asked what information should be conveyed to the carrier by the consignor of a Limited Quantities consignment. The answer, quite simply, is that the consignor must tell the carrier in a traceable form the gross mass of Limited Quantities packages to be picked up – see 3.4.12 of ADR. 49% of candidates told me all about the transport document required by 5.4.1.1 of ADR. Such transport documents are not required for road transport according to ADR.

- Q5. This was a short four section question on the meaning of certain fields of a UN certification code. It was well answered on the whole. A few mistook the figure "5" in one of the fields of the code as having something to do with liquid densities or the capacity in litres. When the packaging is intended for the transport of solids as this one was, the meaning is the maximum permitted gross mass. 16% of candidates made some kind of error about the meaning of the "5".
- Q6. In this question candidates were asked to say three documents which would need to be present on a journey throughout from consignor to consignee. The "throughout" was important. 43% of candidates said that the Vehicle Packing Certificate should be present throughout the journey when this is not the case. It is only required to be present when a passage by sea is included in the journey see 5.4.2 where the scope is limited to the road leg of the journey which precedes the journey by sea i.e. not after the sea journey has been completed.
- Q7. Candidates were asked in the first part of this question what undertakings are required to appoint a DGSA. The answer lies in 1.8.3.1 of ADR: "Each undertaking, the activities of which include the *consigning* or the carriage of dangerous goods by road, or the *related* packing, loading, filling or unloading shall appoint...."

Most got this however, 12% gave some other answer including citing some of the DGSA duties.

I put the word "consigning" in italics as this word was added to 1.8.3.1 in the 2019 edition of ADR. There is derogation, by the way for consignors to appoint a DGSA – see 1.6.1.44 in ADR.

I put the word "related" in italics because there is a legal interpretation from the European Commission which, to paraphrase, clarifies that unloading at the end of a journey (at the consignee as defined in the transport document) is not transport related unloading, more, shall we say, unloading for production?

**Q8.** The final question concerned the intervals for periodic inspections for UN portable tanks intended for the transport of deeply refrigerated liquefied gases (cryogenic gases). The answer should have been taken from section 6.7.4 of chapter 6.7 of ADR.

# C. Comments on Candidates' Performance (include identification of any gaps in knowledge\areas of weakness)

Any comments appear above.

# **D.** Comments on the Marking Process

None.

SIGNATURE:	DATE:	23.03.2019
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