# PRINCIPAL MARKERS REPORT ALL CLASSES IRELAND MARCH 2018

### CHARTERED INSTITUTE OF LOGISTICS AND TRANSPORT IN IRELAND

## PRINCIPAL MARKER'S REPORT FORM

#### DANGEROUS GOODS SAFETY ADVISER EXAMINATION

SUBJECT: ALL CLASSES

**EXAMINATION DATE:** 9th March 2018

No Attempting Examination: 44

**No Passing Examination:** 35

**% Pass Rate:** 79.55%

Average Mark 40.02

## **A.** General Comments

The results overall are slightly down compared to when a similar paper was set. No one quite made a perfect score though 8 candidates scored 90% or more with three of those just one mark short of perfection.

The use of the word "transportation" is inappropriate in DGSA exam papers. The preferred word in "transport" as one finds used throughout all documents including the ADR prepared by the United Nations organisation.

# **B.** Comments on Individual Questions

Please make comments as appropriate for each question.

Q1. This question was in two parts, both of which had two subparts. In the first part two vapour pressure data at the relevant temperature were given. Candidates were asked to say which of the two qualified as a gas and which as a highly vaporous liquid. 13.5% of candidates could not attempt any of the first two subparts whilst a similar further 13.5% of candidates thought that the substance in the first part qualified as a gas when if the criteria were read carefully enough, it was clear it did not. Most got the second subpart right.

In the second part, candidates were firstly asked to determine whether a gas should be classified as toxic and flammable or not. This was badly answered. Candidates were expected to use an  $LC_{50}$  datum to determine whether the classification criteria for toxic gases were met and also to use data concerning the flammable range to determine whether the gas was flammable or not. Some candidates just jumped to the conclusion that the gas qualified as both without using the data to justify their answer. Those that did not use the data to justify the gas having to be classified as both toxic and flammable (38.5%) lost marks

A few thought the gas would transfer to Class 6.1 and tried to give it a packing group possibly because the classification rules in 2.2.2 of the ADR lead one to the logarithmic graph in 2.2.61 for the classification of toxic vapours. This is one of the classes in transport law where physical state is the first and foremost rule for classification. Once a gas, it remains a gas for the application of the rest of the regulations. The reference in 2.2.2 to the logarithmic graph in 2.2.61 is merely to save having to repeat the graph twice in the regulations. Trainers please note.

- Q2 This was a two part question concerning the stacking mark to be used on IBCs from a certain date. The first part concerning the meaning of the mark seemed to give candidates little difficulty. 67% of candidates failed to inform me that the use of the stacking mark became compulsory from 01.01.2011 onwards and proffered some alternative solution. The answer was on the same page of the ADR as where the significance of the mark is found, in the superscript note b below the table.
- Q3 This question was also in two parts. In the first part, candidates were asked to classify and determine the packing group of a flammable metal. It was well answered on the whole.

In the second part candidates were required to discover a Special Packing Provision in Packing Instruction P002. Those who found it answered the question well and gained a useful five marks. In the past when a similar question has been set, many candidates could not locate the Special Packing Provision but not so this time, pleasingly. To gain the five marks candidates merely had to write out in full the Special Packing Provision applicable to the substance concerned which was in Packing Instruction P002.

Q4 This question, another in two parts, required candidates to show the dangerous goods information which should appear on the transport document for a given substance. It was well answered on the whole though candidates are reminded that tunnel codes should be written in brackets.

In the second part, candidates were asked to state conditions under which the substance upon arrival in 200 litre drums could be repacked into uncertified shrink-wrapped trays. This was a clear indication that the Limited Quantities rules should be invoked. It was reasonably well answered though a few omitted the 20 kg limit for the gross mass of the trays or said the incorrect 30 kg or even gave the limit in the incorrect unit of litres.

The second subpart of this second part of question 4 required candidates to determine why it was permissible to transport the inner packagings in non-certified packagings. The correct answer is to refer to 3.4.1(e) which exempts Limited Quantities packagings from the requirements of 4.1.1.3 of Chapter 4.1 i.e. the paragraph in the general packing provisions of this chapter which states that unless otherwise stated elsewhere in the ADR, the packagings do not need to be UN certified. A huge number 66%) fell short of the explanation I was looking for, i.e. based on 4.1.1.3.

Q5 This was a short question based on the 2011 domestic regulations as amended in 2013 concerning a derogation for old gas receptacles. Those that looked in CDGRR seemed to have no difficulty with the question whatsoever. However 23% of candidates either could not attempt or looked for an answer in the ADR.

Q6 This was another question in two parts. It concerned Light Gauge Metal Packagings (LGMP). In the first part, candidates were asked to explain the code for one of these packagings where e.g. the UN packaging symbol is replaced by the term "RID/ADR". They were also asked to explain the second element of the coding of one of these packagings which all start with an "0 rather than one of the more usual numbers for UN certified packagings 1 to 6. 43% of candidates did not explain fully the meaning of the term "RID/ADR" which in this case meant that their use is restricted to rail, road *and the inland waterway* modes of transport. A few could not do it at all and a few more could not attempt the meaning of "0A2".

In the second part of this question, candidates were asked to state the drop test height for these packagings. The big point about these LGMP is that reduced levels of testing are required for them particularly for the drop test which, for Packing Group II is reduced to 0.6m, for example. 36% of candidates either mostly gave the normal height for UN certified packagings of 1.2m with a few plumping for 1.8 m or 0.8 m or lost marks as a result. Of those who did give the correct reduced height of 0.6m, 48% gave me both 0.6m and 0.4m as if I were to pick which one applied. The question was clear enough, I think, to indicate which one applied, given that the packaging code had a "Y" in it.

Q7 This was another question in two parts. It concerned the Packing Instruction for an explosive. Most candidates found the applicable Packing Instruction easily enough, it seems. The second part was based on the Packing Instruction and how it was to be interpreted and applied. It, too, was well answered, seeming to present little difficulty to candidates. Although this question was about the choice of packaging i.e. from Packing Instruction P130, 71% of candidates also informed me that Large Packing Instruction LP101 also applied to the substance concerned. This was unnecessary additional information even if correct.

Candidates were asked to choose a suitable UN certified packaging from the choices given in the relevant Packing Instruction and to give its code. This was well answered on the whole though one or two drifted off into PP67 which allows in some circumstances for the substance concerned to be transported *unpackaged*, surely an unnecessary step given that the question as for some packaging details.

- Q8 This was a short question about the marking and labelling of some 25 litre drums containing a product with a primary and subsidiary danger as well as being an aquatic pollutant. 16% of candidates forgot to tell me that the drums should be marked with the environmentally hazardous substance mark whilst one or two more forgot to confirm that the UN number should be marked on the drums or that they required a No. 3 label. Some candidates thought that the double-arrow orientation mark should be affixed to the Large Packagings which I found a little strange.
- Q9 The final question concerned the training provisions of Chapter 1.3. I was at pains in drafting the question to explain to candidates that this was *not* a question about Chapter 8.2 and the driver training provisions. Nevertheless, 16% of candidates ignored this instruction and tried to answer it from Chapter 8.2. Why I ask myself when we go to the trouble of telling candidates not to look in this chapter in the question! Those who did this lost the three marks for this question.
- 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.