



SCOTTISH QUALIFICATIONS AUTHORITY

DANGEROUS GOODS SAFETY ADVISER EXAMINATION

EXAMINATION BOOKLET – ROAD

Candidate's signature box

Candidate's Name Surname Forename(s)

Date of Birth

Examination Centre

Sample Paper 1400 – 1545

Seat no:

Seat number box

SAMPLE LAYOUT

NOTES

- 1. You are required to complete the section above in BLOCK CAPITALS.
2. You must sign the examination booklet in the box provided in the top right hand corner.
3. You must enter your seat number in the box provided.
4. You must not detach any sheets from the examination booklet.
5. Attempt ONE case study from Section A and ALL of Section B.
6. Do not write anything below this line.

For Markers' use only

Marks Awarded

Table with columns: Section A, Section B (2, 3, 4), Total Marks

Marker's initials

Principal Marker's initials

For SQA use only

## INSTRUCTIONS TO CANDIDATES

It is recommended that you read through the paper before answering any questions

Candidates are only required to record references to the 2009 “Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations (CDG2009)” where one has been **specifically** asked for in a reference box within the examination paper.

Questions may be answered in any order and it is recommended that you answer those questions you consider to be the more straightforward questions first.

You need to gain at least 32 marks to pass this paper.

Answers to questions must be given in the space provided below each question.

In your answers, use the permitted abbreviations for reference documents contained in the handout.

All answers **must** be in ink.

If you need extra space, write “continued” and finish your answer in the space provided at the end of this booklet. Make sure you mark any continuation with the question number.

Rough work, not intended to be read by the marker, should be scored out.

No part of this booklet is to be torn out. No writing is allowed on any other paper.

No unauthorised material may be brought into the examination room.

No talking or other means of communication between candidates is allowed during the examination. Any candidate found to be doing so will be subject to instant dismissal from the examination room. All queries should be directed to an invigilator.

You may not leave the examination room during the first 30 minutes or last 15 minutes of the examination, unless you are ill. In this case, let an invigilator know and s/he will make sure the correct procedure is followed.

You must hand your booklet to an invigilator before leaving. **Booklets must not be removed from the examination room under any circumstances.**

Please note that this is a sample paper only. Questions and answers may be incomplete.

[Turn over for Section A on *page four*]

Answer ALL questions

Marks

Notes: When you use a reference document to find your answer, you must include the following information – the document title and, as appropriate, the relevant regulation, schedule, paragraph and sub-paragraph e.g. CDG2009 Regulation 5, Schedule 1 or part, chapter and section e.g. ADR 1.1.1.2. Marks may be lost if relevant detail is omitted.

Give your answer in the space provided below each question.

Remember to include details of your references in the box provided or, where there is no box, include reference as part of your answer.

Attempt ONE case study from Section A and ALL of Section B.

SECTION A

Answer ONE of the following case studies. You have a choice of three.  
(In the actual examination, there is usually a choice of at least three case studies)

Case Study 1A


ABC Agricultural Merchants are based in Exeter.

The company stocks a range of chemicals for local farmers and offers a haulage operation to collect product from farmers for delivery to other customers, using a vehicle with a permissible maximum mass of 6 tonnes.


Last Monday, ABC had to make two deliveries to farmers, as detailed below, and one collection. The collection involved two pallet boxes of apples. These were picked up **before** the deliveries were carried out.

Delivery 1			Delivery 2		
UN2067	III	2 x 1000kg flexible IBCs	UN1950		6 aerosols (flammable) x 0.5L in a box
UN2784	II	1 x 10L bottle	UN2784	II	2 x 10L bottles
UN3006	II	1 x 5L jerrican	UN3006	II	1 box containing 4 x 5L jerricans

UN2784 is supplied by the manufacturer to ABC in a box containing 2 x 10L bottles which has the following UN mark:

 4G/Y22/S/06/F BVT83428

UN3006 is supplied by the manufacturer to ABC in UN marked 5L jerricans with the following UN mark:

 3H1/X/100/06/D BAM4678

**Guidance:** You need to carefully read the above narrative and use the details contained within it to provide the information to guide you to the various sections of the Approved Texts. For example, using the vehicle details / load details to decide what Regulations apply and what actions are required – labeling / documentation / equipment / training

Attempt ONE case study from Section A and ALL of Section B.

Marks

Remember to include details of your references in the box provided or, where there is no box, include reference as part of your answer.

1A (continued)

Shortly after collecting the apples and prior to making any deliveries the driver took a break at a café. HSE inspectors saw the vehicle and stopped to inspect it.

When the driver returned, he assisted the inspectors who had identified some problems with the consignment and the vehicle.

**Guidance:** to answer the questions in this case study, candidates will need to find out more about the consignments and consider a number of factors. These include:

- the name, class, subsidiary risk(s) (if any) and transport category of the substances;
  - the types of packages being shipped e.g. single, combination, IBC etc;
  - whether there any relevant exemptions relating to goods packed as limited quantities (ADR 3.4) and/or quantities carried per transport unit apply (ADR 1.1.3.6)
- (a) A model no. 5.1 placard was being displayed on each side of the vehicle; there were no other markings. Is this correct? If not, what markings and/or placards (including dimensions) should have been displayed on the vehicles and where?

(5)

**Answer:**

**No. Placards are not required in this case as the packages are not being carried in a container. A plain orange-coloured plate, 40 cm wide x 30 cm high, is required at the front and rear of the vehicle.**

**Guidance:** this answer is determined by the type of transport unit being used and any exemptions related to quantities carried per transport unit.

Reference	ADR 5.3.2.1.1 and 5.3.2.2.1
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- (b) The inspectors could only find entries relating to UN2067 on the transport document being carried by the driver. When questioned about this, the driver claimed he had been advised that details of the other consignments were not required on the vehicle. Is this correct? Explain your answer.

(3)

Reference	ADR 3.4.6 and 5.4.1.1.1
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Attempt ONE case study from Section A and ALL of Section B.

Marks

Remember to include details of your references in the box provided or, where there is no box, include reference as part of your answer

1A (continued)

- (c) When the inspectors asked to see the driver's ADR dangerous goods training certificate he said he had been told he did not need one Was the driver correct? Explain your answer.

(4)

*Answer:*

*He is not correct. The goods are in scope to the regulations as 55kgs of Transport Category 2 goods (x3) total 165kgs and 1000Kgs of Transport Category 3 is greater than 1000kgs*

Reference	
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- (d) The inspectors could only find one 4 kg fire extinguisher on the vehicle. Was this acceptable? Please explain

(4)

*Answer:*

*The vehicle needs to be fitted with the equivalent of 8kgs of fire extinguishers of which at least 1 shall have a capacity of 6Kgs. A 2kg equivalent should be fitted in the cab which may be included in the total of 8kgs.*

Reference	ADR 8.1.4
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- (e) When the inspectors checked the vehicle for other safety equipment, they could only find a yellow warning vest. As a minimum, what other items of safety equipment should have been on the vehicle?

(5)

*Guidance:*

*Candidates should study ADR 8.1.5*

Reference	
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- (f) The inspectors then looked at the load in the back of the vehicle. They expressed some serious concerns on discovering the various consignments on board. Why?

(5)

Reference	
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**Attempt ONE case study from Section A and ALL of Section B.**

Marks

**Remember to include details of your references in the box provided or, where there is no box, include reference as part of your answer**

**1A (continued)**

- (g) The inspectors also noticed that the aerosols and the bottles of UN2784 were loose and not in boxes. When they asked the driver why, he just said that is how they were given to him. The inspectors therefore decided to phone ABC's transport manager for an explanation. How should he have responded?

(3)

Reference	<b>CDG2009</b>
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- (h) One of the consignments of UN3006 was found in a box with no dangerous goods marks or labels on it. The inspectors claimed this was in breach of the regulations. Why? How should the box have been marked and/or labelled?

(6)

*Answer:*

*The box should show a 6.1 label, UN 3006, orientation arrows on two opposite sides and the word 'OVERPACK'*

**Guidance:**

*UN3006 is packaged in a single packaging (a jerrican - 3H1) and therefore the box is an overpack*

Reference	<i>ADR 5.1.2.1</i>
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(35)

SECTION B

Marks

Answer ALL questions

Remember to include details of your references in the box provided or, where there is no box, include reference as part of your answer

- 2 (a) State whether approved ADR training is required for a driver of a vehicle with a permissible maximum weight of 5 tonnes carrying 3 x 4 litre nominal capacity cylinders of compressed chlorine, giving reasons for your answer.

(3)

Reference	
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- (b) Using ADR, what type and number (i.e. how many) of fire extinguishers should be carried on the vehicle in (a) above?

(2)

Reference	
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- 3 A GB registered tank vehicle is carrying sulphuric acid, fuming from Manchester to London. The Hazard Warning Panels show '4WE'.

- (a) What placard(s) and UN number should be shown?

(2)

*Answer:*

*UN 1831*

*Placards for class 8 and class 6.1*

- (b) Explain the meaning of the '4' and the 'E'.

(3)

*Answer:*

*'4' – Use dry agent*

*'E' – Public safety hazard – people should be warned to stay indoors with all doors and windows closed but evacuation may need to be considered. Consult Control, Police and product expert.*

Reference	<i>CDG2009 Regulation 6(3) Schedule 1 and DG EAC List</i>
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**SECTION B**

Marks

**Answer ALL questions**

**Remember to include details of your references in the box provided or, where there is no box, include references as part of your answer**

- 4** A consignment of packaged dangerous goods is being shipped by road and sea from Italy to Germany.

For the purpose of this question, **ignore** the implications of part of the carriage being by sea.

- (a) List **two** items, specific to the product, that must be shown on the transport document for the road journey. (2)

***Guidance:***

*Any 2 from;*

*UN number*

*Proper Shipping Name*

*The Class*

*The Packing Group*

Reference	
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- (b) In what language(s) must the transport document be completed in? (3)

***Answer:***

***The language of the country of origin and if that is not English, French or German then also in one of those three languages.***

Reference	<i>ADR 5.4.1.4.1</i>
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*[END OF QUESTION PAPER]*

**CONTINUATION SHEET**

**This page may be used if further space is required for your answers.**

**Remember to clearly mark each question number and include details of your references**