

Scottish Qualifications Authority

Dangerous Goods Safety Adviser Examination

Examination Question Booklet



All Classes

Exam Date

1115 - 1300

Candidate Number

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Date of Birth

__	/	__	/	____
DD		MM		YYYY

Seat Number

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Please tick the text that you will be referencing

ADR	
RID	
ADN	

Examination Centre

Centre No. Centre Name

C	
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Notes

- 1 You are required to complete the section above in BLOCK CAPITALS.
- 2 You must enter your seat number in the box provided.
- 3 You must not detach any sheets from the examination booklet.
- 4 Do not write anything below this line.

For Markers' use only

Marks awarded

1	2	3	4	5	6	7	8	Total marks

Marker's initials	
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Principal Marker's initials	
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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 32 marks to pass this paper.

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

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

All answers **must** be in **Black or Blue ink only**.

Any papers written in **Pencil will not be marked**.

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.**

Answer ALL questions

NOTES

When you use a reference document to find your answer, you must include the following information:

For RID, ADR or ADN - the relevant part, chapter, section, sub-section e.g. 5.4.1.2.3.2 and, where applicable, packing instruction number e.g. 4.1.4.1 P001

For CDG2009 (as amended) - the relevant regulation, schedule, paragraph and sub-paragraph, e.g. CDG2009 Regulation 5, Schedule 1 and, where applicable, DG EAC List or ADTP

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.

- 1 A new free-flowing liquid cleaner has been developed. It has the following properties:

Boiling point is 32°C and flashpoint is -20°C

It causes irreversible damage of intact skin tissue in 30 minutes after 2 minutes exposure

State:

- (a) the class and packing group for this substance. Show how you arrived at the decision.

(6 marks)

Reference	
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- (b) an appropriate UN number and proper shipping name for this liquid.

(3 marks)

Reference	
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Remember to include details of your references in the box provided.

- 2** A pallet of UN 2623, PG III, is to be moved by road from Plymouth to Aberdeen in the UK.

There are 100 fibreboard boxes, each containing 12 inner packagings of 0.4 kg. Each box weighs 5kg gross.

The boxes are not UN tested and approved and the pallet is stretch-wrapped in black plastic.

- (a)** Describe the marks and or labels required on each box? **(2 marks)**

- (b)** Describe the marks and or labels that must be shown on the stretch-wrap? **(3 marks)**

Reference	
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- 3** State the class and, where applicable, the packing group, for the following substances:

- (a)** a substance with a vapour pressure of 320 kPa at 50°C **(2 marks)**

Reference	
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- (b)** a powder with an LD₅₀ (dermal) of 50 mg/kg **(2 marks)**

Reference	
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- (c)** a substance capable of causing life-threatening or fatal disease in otherwise healthy humans or animals. **(2 marks)**

Reference	
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Remember to include details of your references in the box provided.

4 (a) Using RID/ADR/ADN:

Describe the marks and labels which must be applied to a fibreboard box containing:

4 x 3 L bottles of nitroglycerin solution in alcohol, with 0.7% nitroglycerin.

(4 marks)

Reference	
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(b) What specific requirement applies to the construction of any packagings used for this substance?

(2 marks)

Reference	
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5 (a) A leakproof plastics drum (1H2) containing UN0082 is being prepared for consignment. The substance is contained in a material which is impervious to liquid. There are no inner packagings. Does this packing arrangement appear acceptable?

(3 marks)

Reference	
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(b) The commercial name for the substance is 'Blasmer'. Describe the marks and labels which must be applied to a package containing this substance.

(6 marks)

Reference	
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Remember to include details of your references in the box provided.

6 A consignment of dimethyldichlorosilane is to be carried in a portable tank.

(a) You have the choice of a T9 or T14 tank.

State which one is acceptable and explain why.

(3 marks)

Reference	
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(b) Explain the special provisions that apply when this substance is transported in a portable tank.

(4 marks)

Reference	
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7 Provide a transport document entry for a consignment consisting of 20 steel drums each containing 200 litres of diesel, UN1202 with a flashpoint of 56°C.

(4 marks)

Reference	
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Remember to include details of your references in the box provided.

8

A UN packaging approval mark includes the code '6HD2'.

Describe in full the meaning of '6HD2'.

(4 marks)

Reference	
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(50 marks)

[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.

SAMPLE PAPER

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