

Dangerous Goods Safety Adviser Examinations

Sample CORE Examination Questions.

Note: Candidates should justify their answers by quoting all references used to produce them. Paragraph numbers and Chapters of the ADR should be quoted. Regulation numbers and / or Schedule numbers should be quoted from Irish regulations.

1. Complete the following table:

UN No.	Substance or Article	Class / Division	Packing Group
	n-PROPYL CHLOROFORMATE		
3269			
	Vanadium oxysulphate		

Reference(s):	
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2. A new liquid mixture has a flashpoint of 22 °C, a boiling point of 105°C and an LD₅₀ (oral) of 220 mg/kg.

Classify the mixture.

Reference(s):	
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3. What danger marks and labels would be needed on 200 litre drums of UN 2965?

Reference(s):	
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4. State the Packing Instruction applicable to UN 1809. State also whether this substance may be carried in IBCs.

Reference(s):	
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5. What is the amount of the penalty a consignor may pay instead of being prosecuted upon being served with a Notice by an Inspector when alleged to have broken the requirements of the Carriage of Dangerous Goods Regulations in lieu of prosecution?

Reference(s):	
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Sample ALL CLASSES Examination Questions.

1. Lafange is a new solid metal cleaning mixture about to be placed on the market. It has been shown to cause full thickness destruction of intact skin tissue after 45 minutes contact time in less than three days. It has also been shown to exhibit a mean burning time equal to the mean burning time of a 3:7 mixture of potassium bromate and cellulose.

(a) Classify the mixture

Reference(s):	
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(b) According to the ADR, to what subdivision of the class you have chosen does the mixture belong?

Reference(s):	
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(c) Select a suitable Proper Shipping Name and UN number for the mixture, noting that the technical names of the two dangerous ingredients are *betule* and *raboxlin*.

Reference(s):	
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(d) The mixture is to be sold in 0.5 kg plastic bottles. It is proposed to transport them in boxes, each containing four bottles. State why it would not be necessary to have the boxes certified as UN performance tested packagings.

Reference(s):	
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(e) State the marks and labels, if any, which should be shown on the boxes, giving the applicable dimensions.

Reference(s):	
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2. What packing method is applicable to UN 0502? Under what conditions is it permissible to transport article of this UN number unpackaged?

Reference(s):	
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3. Give full the meaning of the following code on a package:

 6HA1/Y1.6/150/07/USA/MR17

Reference(s):	
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4. A distributor of kerosene sends a driver out on a 'milk round' of deliveries on a vehicle in 10 litre drums. The distributor is based in Limerick and does not cross any national borders. Why is it permissible to leave the names and addresses of the consignees out?

Reference(s):	
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5. A consignor asks a carrier to transport UN 1626 in 1000 litre capacity IBCs on a journey from Cork to Warsaw. The carrier only operates open, 'flat bed' vehicles. Explain why the carrier should refuse the load.

Reference(s):	
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Sample ROAD Examination Questions.

Section A

Sample Case Study

An organochlorine pesticide is to be transported dissolved in the liquid white spirit. The preparation has an LD₅₀ Oral Rat toxicity value of 45 mg/kg and an LD₅₀ Dermal Rabbit toxicity value of 300 mg/kg. The flashpoint of the preparation has been measured at + 41°C. The active ingredient in the pesticide is Dobbex. Transport will take place both within Ireland and internationally to mainland Europe using various containment systems.

- a) Classify the pesticide and determine its packing group.

Reference(s):	
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- b) Select an appropriate UN Number and Proper Shipping Name.

Reference(s):	
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- c) Is transport of the pesticide by road tanker (fixed tank) permitted?

Reference(s):	
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- d) State the Hazard Identification Number for the pesticide.

Reference(s):	
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- e) The pesticide is to be transported in road tankers. What placarding and marking must be displayed on a road tanker?

Reference(s):	
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- f) State the dangerous goods information which must be shown on the transport document about the road tanker loads travelling from Athlone to Duisburg.

Reference(s):	
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The pesticide is also to be sold in 100 ml plastic bottles, and 10 litre polygonal plastic drums in Ireland.

- g) Can the plastic bottles be transported under the limited quantities provisions? If so state any additional requirements concerning the packing in order to use the limited quantities exemptions.

Reference(s):	
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- h) It is proposed to transport the 10 litre drums of the pesticide on a vehicle which will also deliver flour to a bakery for bread making. Is this permitted?
If not say why not. If so say under what conditions it may be allowed.

Reference(s):	
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- i) 2000 x 10 litre drums of the pesticide are being carried on a 40 tonne maximum permissible mass articulated vehicle. How many fire extinguishers should be fitted and of what capacity?

Reference(s):	
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- j) The consignor asks the driver to take an extra 200 x 10 litre drums when he arrives to load. Whose duty is it to verify that the vehicle will not be overloaded according to the ADR?

Reference(s):	
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Section B.

1. Clinical waste, unspecified, n.o.s. of Class 6.2 is to be carried on a vehicle. Explain why the driver's torch is allowed to have metal surfaces.

Reference(s):	
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2. State whether instruction in writing for the driver would be needed when the following loads are carried on separate vehicles:

(a) 20 x 25 litre drums of acetone.

(b) 20 x 25 litre drums of phosphoric acid solution.

(c) 10 x 25 litre drums of sodium hydroxide solution of Packing Group II and 2 x 200 litre drums of 20% ammonia solution.

Reference(s):	
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3. What is the duration of a suitable training course for a driver, with a driver training certificate that is valid for the carriage of dangerous goods other than in tanks, wishing to specialise as a tank driver?

Reference(s):	
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4. State three different kinds of person who may be appointed as a dangerous goods safety advisor.

Reference(s):	
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Dangerous Goods Safety Adviser Examinations

Sample CORE Examination Questions with Solutions.

Note: Candidates should justify their answers by quoting all references used to produce them. Paragraph numbers and Chapters of the ADR should be quoted. Regulation numbers and / or Schedule numbers should be quoted from Irish regulations.

1. Complete the following table:

UN No.	Substance or Article	Class / Division	Packing Group
2740 (1 mark)	n-PROPYL CHLOROFORMATE	6.1 (1 mark)	I (1 mark)
3269	POLYESTER RESIN KIT (1 mark)	3 (1 mark)	II or III (1 mark)
2931 (1 mark)	Vanadium oxysulphate	6.1 (1 mark)	II (1 mark)

Reference(s):	2009 ADR: Alphabetical index, Table B, and Table A: the Dangerous Goods Lists, columns (1), (2), (3a), and (4), Chapter 3.2. (2 marks)
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2. A new liquid mixture has a flashpoint of 22 °C, a boiling point of 105°C and an LD₅₀ (oral) of 220 mg/kg.

Classify the mixture.

Solution: The flashpoint and boiling point data indicate this is a liquid of Class 3, Packing Group II. (1 mark)
 The acute oral toxicity data also indicate this is a liquid of Class 6.1, Packing Group III. (1 mark)
 We must find which of the two possible classifications takes precedence and therefore which of the dangers becomes the subsidiary risk. (1 mark)
 Referring to the rules of precedence and the Table of Precedence we find that the flammability takes precedence over the toxicity so that the classification of the mixture should be Class 3, Packing Group II with a toxic subsidiary risk. (1 mark)

Reference(s):	2009 ADR: Subparagraphs 2.2.3.1.3, 2.2.61.1.7, Chapter 2.1. (1 mark) The Table of Precedence, subparagraph 2.1.3.10, Chapter 2.1 (1 mark)
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3. What danger marks and labels would be needed on 200 litre drums of UN 2965?

Solution: The drums would need to be marked with the UN number preceded by the letters 'UN' i.e. 'UN 2965. (1 mark)
The drums would also have to be labelled with a number 4.3 dangerous when wet, number 3 flammable liquid and number 8 corrosive diamond labels. (1 mark)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, columns (1) and (5), Chapter 3.2. (1 mark) Subparagraphs 5.2.1.1 and 5.2.2.1.1, Chapter 5.2 (1 mark)
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4. State the Packing Instruction applicable to UN 1809. State also whether this substance may be carried in IBCs.

Solution: Packing Instruction P001. (1 mark)
As no IBC packing instruction is mentioned in the Dangerous Goods List for this substance, transport in IBCs is forbidden. (1 mark)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, column (8), Chapter 3.2 (1 mark)
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5. What is the amount of the penalty a consignor may pay in stead of being prosecuted upon being served with a Notice by an Inspector when alleged to have broken the requirements of the Carriage of Dangerous Goods Regulations in lieu of prosecution?

Solution: 190 euros. (1 mark)

Reference(s):	CDGRR 2007: Schedule 4 (1 mark)
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Sample ALL CLASSES Examination Questions with Solutions.

1. Lafange is a new solid metal cleaning mixture about to be placed on the market. It has been shown to cause full thickness destruction of intact skin tissue after 45 minutes contact time in less than three days. It has also been shown to exhibit a mean burning time equal to the mean burning time of a 3:7 mixture of potassium bromate and cellulose.

(a) Classify the mixture

Solution: The skin tissue destruction datum indicates this is a corrosive solid of Class 8, Packing Group II. (1 mark)
The mean burning time datum also indicate this is an oxidising solid of Class 5.1, Packing Group III. (1 mark)
We must find which of the two possible classifications takes precedence and therefore which of the dangers becomes the subsidiary risk. (1 mark)
Referring to the rules of precedence and the Table of Precedence we find that the corrosivity takes precedence over the oxidising danger so that the classification of the mixture should be Class 8, Packing Group II with an oxidiser subsidiary risk. (1 mark)

Reference(s):	2009 ADR: Subparagraphs 2.2.51.1.7 (c), 2.2.8.1.6 (b), Chapter 2.2. (1 mark) The Table of Precedence, subparagraph 2.1.3.10, Chapter 2.1. (1 mark)
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- (b) According to the ADR, to what subdivision of the class you have chosen does the mixture belong?

Solution: CO2 (1 mark)

Reference(s):	2009 ADR: Subparagraph 2.2.8.1.2, Chapter 2.2. (1 mark)
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(c) Select a suitable Proper Shipping Name and UN number for the mixture, noting that the technical names of the two dangerous ingredients are *betule* and *raboxlin*.

Solution: From the 'List of collective entries', the correct entry is –
 UN 3084 CORROSIVE SOLID, OXIDISING, N.O.S.
 For UN 3084 (for both packing groups I and II), 'Special provision 274' applies.
 'Special provision 274' requires that the Proper Shipping Name is supplemented.
 Hence the full Proper Shipping Name is -
 CORROSIVE SOLID, OXIDISING, N.O.S. (betule and raboxlin)
 (2 marks)
 UN 3084 (1 mark)

Reference(s):	2009 ADR: Subparagraph 2.2.8.3 Chapter 2.2. (1 mark). Table A: The Dangerous Goods List, column (6), Chapter 3.2 and Special Provision 274, Chapter 3.3. (1 mark)
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(d) The mixture is to be sold in 0.5 kg plastic bottles. It is proposed to transport them in boxes, each containing four bottles. State why it would not be necessary to have the boxes certified as UN performance tested packagings.

Solution: Limited Quantities provision LQ23 applies to dangerous goods of UN 3084, Packing Group II. (1 mark)
 LQ23 allows inner packagings up to 3 kg and a total of 30 kg in a combination packaging such as an outer box. (1 mark)
 As the bottles only have 0.5 kg in them totalling approximately 2 kgs, the boxes fall within the allowances for Limited Quantities. (1 mark)
 There is no requirement for Limited Quantities packagings to be UN Certified as can be seen by the absence of a cross-reference in Chapter 3.4 to subparagraph 4.1.1.3. (1 mark)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, column (7a), Chapter 3.2 (1 mark) Subparagraphs 3.4.1, 3.4.5 and the Table in 3.4.6, Chapter 3.4. (1 mark)
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(e) State the marks and labels, if any, which should be shown on the boxes, giving the applicable dimensions.

Solution: As the boxes are Limited Quantities, there is no need to label them with any diamond labels. (1 mark)
 The boxes should be marked with the UN number of the goods preceded by the letters 'UN' i.e. UN 3084. (1 mark) The number should be enclosed in a diamond shape area bounded by a line 100mm x 100mm, the width of the diamond shape shall be at least 2mm. (1 mark)


Reference(s):	2009 ADR: Subparagraph 3.4.4, 3.4.5 Chapter 3.4 (1 mark)
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2. What packing method is applicable to UN 0502? Under what conditions is it permissible to transport articles of this UN number unpackaged?


Solution: Packing Instructions P130 and LP101 apply to UN 0502. (1 mark)
 Special packing provisions 'PP67' and 'L1' each permit articles of this UN number to be carried unpackaged if they are large, robust, normally intended for military use without their means of initiation or with their means of initiation containing at least two effective protective features. (2 marks)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, column (8), Chapter 3.2 (1 mark) Packing Instructions P130 and LP101 in subparagraph 4.1.4.1, Chapter 4.1. (1 mark)
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3. Give full the meaning of the following code on a package:

 6HA1/Y1.6/150/07/USA/MR17

Solution:

-  The United Nations packaging symbol (1 mark)
 6HA1 Composite packaging consisting of a plastic receptacle and an outer steel drum (1 mark)
 Y1.6 Intended for liquids of Packing Groups II and III up to a maximum relative density of 1.6 (1 mark)
 150 The hydraulic test pressure in kPa (1 mark)
 07 The year of manufacture (1 mark)
 USA The State authorising the allocation of this mark i.e. the United States (1 mark)
 MR17 The name of the manufacturer or other identification of the packaging specified by the competent authority (1 mark)

Reference(s):	2009 ADR: Subparagraphs 6.1.2.5, 6.1.2.6., 6.1.2.7 and its table, 6.1.3.1 and 6.1.3.7 of Chapter 6.1.2 (1 mark)
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4. A distributor of kerosene sends a driver out on a 'milk round' of deliveries on a vehicle in 10 litre drums. The distributor is based in Limerick and does not cross any national borders. Why is it permissible to leave the names and addresses of the consignees out of the transport document?

Solution: There is a derogation in the CDGRoad Regulations which grants this exemption. (1 mark)

Reference(s):	EC(CDGR)(M_P)R 2007: Regulation 19(a) (1 mark)
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5. A consignor asks a carrier to transport UN 1626 in 1000 litre capacity IBCs on a journey from Cork to Warsaw. The carrier only operates open, 'flat bed' vehicles. Explain why the carrier should refuse the load.

Solution: UN 1626 is MERCURIC POTASSIUM CYANIDE, Packing Group I.
(1mark)
'Special provision for carriage of packages V10' also applies to this substance. This requires that IBCs must be carried in closed or sheeted vehicles or containers. Therefore the proposed vehicle cannot be used.
(2 marks)

Reference(s):	2009 ADR: Table A, The Dangerous Goods List, Columns (1), and (16), Chapter 3.2.. 'Special provision for carriage in packages V10', Chapter 7.2.4. (1 mark)
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Sample ROAD Examination Questions with Solutions.

Section A

Sample Case Study

An organochlorine pesticide is to be transported dissolved in the liquid white spirit. The preparation has an LD₅₀ Oral Rat toxicity value of 45 mg/kg and an LD₅₀ Dermal Rabbit toxicity value of 300 mg/kg. The flashpoint of the preparation has been measured at + 41°C. The active ingredient in the pesticide is Dobbex. Transport will take place both within Ireland and internationally to mainland Europe using various containment systems.

- a) Classify the pesticide and determine its packing group.

Solution: The acute oral toxicity datum indicates this is a toxic liquid of Class 6.1, Packing Group II. (1 mark)
The acute dermal toxicity datum indicates this is a toxic liquid of Class 6.1, Packing Group III. (1 mark)
When a substance exhibits different degrees of toxicity for two or more kinds of exposure, it shall be classified under the highest degree of toxicity. Therefore it may have to be classified as a toxic substance of Class 6.1, Packing Group II. (1 mark)
The flashpoint datum indicates that this is a flammable liquid of Class 3, Packing Group III. (1 mark)
We must find which of the two possible classifications takes precedence and therefore which of the dangers becomes the subsidiary risk. (1 mark)
Referring to the rules of precedence and the Table of Precedence we find that the toxicity takes precedence over the flammable danger so that the classification of the mixture should be Class 6.1, Packing Group II with a flammable liquid subsidiary risk. (1 mark)

Reference(s):	2009 ADR: Subparagraphs 2.2.3.1.3, 2.2.61.1.7, 2.2.61.1.7.1, Chapter 2.2. (1 mark). The Table of Precedence, subparagraph 2.1.3.10, Chapter 2.1. (1 mark)
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- b) Select an appropriate UN Number and Proper Shipping Name.

Solution: From the *'List of collective entries'* (in Chapter 2.2.61), the appropriate entry is –

UN 2995 ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE

For UN 2995 (for both packing groups I and II), 'Special provision 61' applies.

'Special provision 61' requires that the Proper Shipping Name is supplemented.

Hence the UN Number is UN 2995 (1 mark) and

The full Proper Shipping Name is -

ORGANOCHLORINE PESTICIDE, LIQUID, TOXIC, FLAMMABLE

(dobbex) (2 marks)

Reference(s):	2009 ADR: Subparagraphs 2.2.61.1.11.2 and 2.2.61.3, Chapter 2.2.61 and Special Provision 61, Chapter 3.3. (1 mark)
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- c) Is transport of the pesticide by road tanker (fixed tank) permitted?

Solution: Yes (1mark)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, column (12), Chapter 3.2 (1 mark)
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- d) State the Hazard Identification Number for the pesticide.

Solution: 63 (1 mark)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, column (20), Chapter 3.2 (1 mark)
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- e) The pesticide is to be transported in road tankers. What placarding and marking must be displayed on a road tanker?

Solution: Either:

A plain, reflectorised orange plate at the front and rear. (1 mark)

A reflectorised orange plate on each side of the tanker. (1 mark)

- These panels should display the hazard identification number 63 in the upper part and the UN number in the form '2995' in the lower part. (1 mark)

A number 3 flammable liquid placard on each side and at the rear. (1 mark)

A number 6.1 toxic placard on each side and at the rear. (1 mark)

Or:

A reflectorised orange plate at the front and rear. (1 mark)

- These panels should display the hazard identification number 63 in the upper part and the UN number in the form '2995' in the lower part. (1 mark)

If this option is chosen, no orange plates are needed on sides of the tanks. (1 mark)

A number 3 flammable liquid placard on each side and at the rear. (1 mark)

A number 6.1 toxic placard on each side and at the rear. (1 mark)

NB: An accurate diagram of one or the other method is acceptable.

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, columns (1), (5) and (20), Chapter 3.2. Subparagraphs 5.3.1.4, 5.3.2.1.1 and 5.3.2.1.2 (or 5.3.2.1.6), Chapter 5.3 (1 mark)
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- f) State the dangerous goods information which must be shown on the transport document about the road tanker loads travelling from Athlone to Duisburg.

Solution: UN 2995 ORGANOCHLORINE PESTICIDE LIQUID, TOXIC, FLAMMABLE (dobbex), 6.1 (3), II, (D/E) (2 marks)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, columns (1), (2), (5) and (15), Chapter 3.2. Special Provision 61, Chapter 3.3. (1 mark) Subparagraphs 5.4.1.1.1, Chapter 5.4. (1 mark)
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The pesticide is also to be sold in 100 ml plastic bottles, and 10 litre polygonal plastic drums in Ireland.

- g) Can the plastic bottles be transported under the limited quantities provisions? If so state any additional requirements concerning the packing in order to use the limited quantities exemptions.

Solution: Yes providing combination packagings or shrink-wrapped / stretch-wrapped trays are used. (1 mark)

LQ 17 applies to this substance which requires the bottles to be no more than 500 ml if packed in combination packagings or 100ml if in the trays. A maximum of 2 litres worth of the bottles may be placed in the combination packaging or trays. (2 marks)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, column (1), and (7a), Chapter 3.2. The table in subparagraph 3.4.6, Chapter 3.4. (1 mark)
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- h) It is proposed to transport the 10 litre drums of the pesticide on a vehicle which will also deliver flour to a bakery for bread making. Is this permitted? If not say why not. If so say under what conditions it may be allowed.

Solution: Special Provision CV 28 applies to the carriage of this substance. This requires certain precautions to be taken if it is loaded on the same vehicle as foodstuffs. These are:

- The pesticide packages must not be stacked or loaded in immediate proximity to the flour. (1 mark);
- Or if they are then they must be kept apart by
 - complete partitions as high as the pesticide packages (1 mark); or
 - by other dangerous goods packages not showing a Number 6.1, 6.2 or 9 labels (1 mark); or
 - by a space of at least 0.8 metres. (1 mark)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, column (18), Chapter 3.2. Subparagraph 7.5.4 and Special Provision for Carriage CV 28 in subparagraph 7.5.7, Chapter 7.5. (1 mark)
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- i) 2000 x 10 litre drums of the pesticide are being carried on a 40 tonne maximum permissible mass articulated vehicle. How many fire extinguishers should be fitted and of what capacity?

Solution: A total of at least 12kg of fire extinguishers should be carried of which:

- one should be at least 2kg of dry powder suitable for fighting a fire in the engine or cab
- another should be at least 6 kg dry powder
- others making up the minimum 12kg total

(1 mark)

Reference(s):	2009 ADR: Subparagraph 8.1.4.1, Chapter 8.1. (1 mark)
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- j) The consignor asks the driver to take an extra 200 x 10 litre drums when he arrives to load. Whose duty is it to verify that the vehicle will not be overloaded according to the ADR?

Solution: The Carrier. (1 mark)

Reference(s):	2009 ADR: Subparagraph 1.4.2.2.1 (e), Chapter 1.4. (1 mark)
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GENERAL REMARK: Exam paper case study questions are marked out of 32. The number of marks in this case study is higher than 32. This has been done to give candidates a wider understanding of the kinds of questions that may occur in an actual case study.

Section B.

1. Clinical waste, unspecified, n.o.s. of Class 6.2 is to be carried on a vehicle. Explain why the driver's torch is allowed to have metal surfaces.

Solution: Clinical waste, unspecified, n.o.s. of Class 6.2 has the UN number 'UN 3291'. From the Dangerous Goods List, it can be discerned that Special Operating Provision S3 applies to the carriage of infectious clinical waste. This states that Chapter 8.3.4 does not apply and hence the requirement 'to protect all metal surfaces on torches from producing sparks' does not apply. (2 marks)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, columns (1) and (19), Chapter 3.2. Table B: The Dangerous Goods List, Chapter 3.2. (1 mark) Special Operating Provision S3 in Chapter 8.5 and subparagraph 8.3.4, Chapter 8.3. (1 mark)
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2. State whether instruction in writing for the driver would be needed when the following loads are carried on separate vehicles:
- a. 20 x 25 litre drums of acetone.

Solution: Acetone is a substance of Transport Category 2. (1 mark)
The exemptions in Chapter 1.1.3.6 for quantities carried per transport unit, that exempts the need for instructions in writing, applies only if the quantity carried is no more than 333 litres. In this case we have 500 litres so the exemption does not apply. Instructions in writing for the driver would be needed. (2 marks)

- (b) 20 x 25 litre drums of phosphoric acid solution.

Solution: Phosphoric acid solution is a substance of Transport Category 3. (1 mark)
The exemptions in Chapter 1.1.3.6 for quantities carried per transport unit, that exempts the need for instructions in writing, applies when the quantity carried is no more than 1000 litres. In this case we have 500 litres so the exemption does apply. Instructions in writing for the driver would not be needed. (2 marks)

- (c) 10 x 25 litre drums of sodium hydroxide solution of Packing Group II and 2 x 200 litre drums of 20% ammonia solution.

Solution: The sodium hydroxide solution is a substance of Transport Category 2. (1 mark)
The Ammonia solution is a substance of Transport Category 3. (1 mark)
To determine whether the exemptions for quantities per transport unit apply, we must carry out the calculation in Chapter 1.1.3.6.4:-

- Quantity of TC2 x 3 + Quantity of TC3
 - i.e. $(250 \times 3) + 400 = 1150$
- As this number exceeds '1000', instructions in writing for the driver would be required. (3 marks)

Reference(s):	2009 ADR: Table A: The Dangerous Goods List, columns (1) and (15), Chapter 3.2, Table B: The Dangerous Goods List, Chapter 3.2. (2 mark) Subparagraph 1.1.3.6.2, the table in subparagraph 1.1.3.6. 3 and subparagraph 1.1.3.6.4, Chapter 1.3 (1 mark)
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3. What is the duration of a suitable training course for a driver, with a driver training certificate that is valid for the carriage of dangerous goods other than in tanks, wishing to specialise as a tank driver?

Solution: 12 x 45 minute teaching units (1 mark)

Reference(s):	2009 ADR: Subparagraph 8.2.2.4.1, Chapter 8.2. (1 mark)
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4. State three different kinds of person who may be appointed as a dangerous goods safety advisor.

Solution: The head of an undertaking (1 mark)
A person with other duties in the undertaking (1 mark)
A person not directly employed by the undertaking (1 mark)

Reference(s):	CDGRR 2007: Regulation 79 (1) 2009 ADR: Subparagraph 1.8.3.4, Chapter 1.8 (1 mark)
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GENERAL REMARK: Part B questions on exam papers are worth 18 marks. The number of marks for the questions in this Part B is higher. This has been done to give candidates a wider understanding of the kinds of questions that may occur in Part B.