Q 1 A solution of 10% methyl isobutyl ketone and 5% Isopropanol in water had a flash point of 35°C. (7)	
a)	What is the class, classification code and packing group of this solution?
b)	Select an appropriate UN number and proper shipping name for the solution
Ref	
Q2 A shipper wishes to send 12 kg of Thiourea dioxide packed together with 12 L of Tiona fibreboard box. Thioglycol is an environmentally hazardous substance.	
a)	Is this possible and if so, what is the minimum number of inner packages required (4)?
b)	State one other condition that must be verified in order for the proposed packaging to proceed (1)?
c)	Considering the quantities involved, what labels and marks must be displayed on the outer box (8)? Justify your answer.
Ref	



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- Q4 Selenic acid is to be shipped from Italy to Ireland in inner packagings contained in small fibreboard boxes. Each box only contains 500 g of Selenic acid
  - a) Do the fibreboard boxes need to be UN approved? Explain your answer (3)

b) The boxes will be placed on pallets and covered with black shrink displaying the UN number. Is this sufficient? Explain your answer as fully as you can, giving any relevant dimensions for any marking of the pallet which you consider necessary (6)

Ref

- Q5 (i) Define a radioactive material (1)
- (ii) What is the activity concentration for an exempt material containing Be-7? (1)

Ref

Q6 What UN number and proper shipping name apply to a blood sample being sent from a doctor's surgery to a laboratory for testing for possible Hepatitis B infection?

Ref

Q7		A driver is getting ready to deliver a load of dangerous goods
	a)	A worker coming off shift ask the driver for a lift home as the driver will be passing his home on the way. Is this permitted?
	b)	Realising that there will be nobody available to assist him unloading the goods, the driver asks his manager for an assistant to accompany him and help with the unloading. Is this possible?
		Q8 An HSA inspector find that the appointed DGSA has failed to prepare an Annual Report. What is the fixed penalty that can be issued in lieu of prosecution for such an offence?
		Ref
		Q9 What training is required for personnel who load dangerous goods vehicles?
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