



**Science Revised Syllabus  
Junior Certificate  
Higher Level**

**Past Exam Questions on  
C Separating Substances**

#### Q4 part (b) 2013

(b) The two science students have just separated seawater from sand.

(i) Name a suitable method for this separation.

Name \_\_\_\_\_

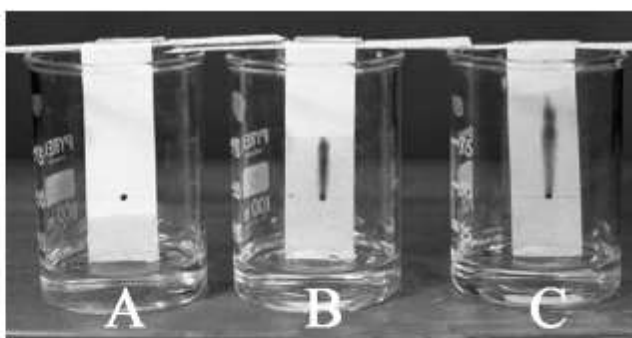
(ii) How could the salt be separated from the seawater?

How? \_\_\_\_\_



#### Q4 Part (h) 2012

(h) Paper chromatography was used to find the composition of brown ink in a pen. The same liquid, paper and pen were used in each of the three experiments shown. They were started at different times, C first then B and finally A.



(i) Why is the ink dot above the level of the liquid in each beaker?

Why? \_\_\_\_\_

(ii) What caused the dots of ink on the papers B and C to spread upwards?

What? \_\_\_\_\_

(iii) Why were colours, other than brown, seen in B and C as the ink moved up the paper?

Why? \_\_\_\_\_

**Q4 Part (c) 2010**

(c) A mixture of sand and salt was stirred up with water and then filtered as shown in the diagram.

(i) Substance A was retained by the filter paper. Name A.

A \_\_\_\_\_

(ii) Substance B was passed through the filter paper. Name **one constituent** of B.

B \_\_\_\_\_



**Q3 Part (c) 2009**

(c) The photograph shows a pupil with a sweep net. The sweep net is used to collect small animals e.g. insects from vegetation in a habitat so that they can be identified.

(i) Name a *second item* of equipment used to collect small animals for identification. (3)

Name \_\_\_\_\_

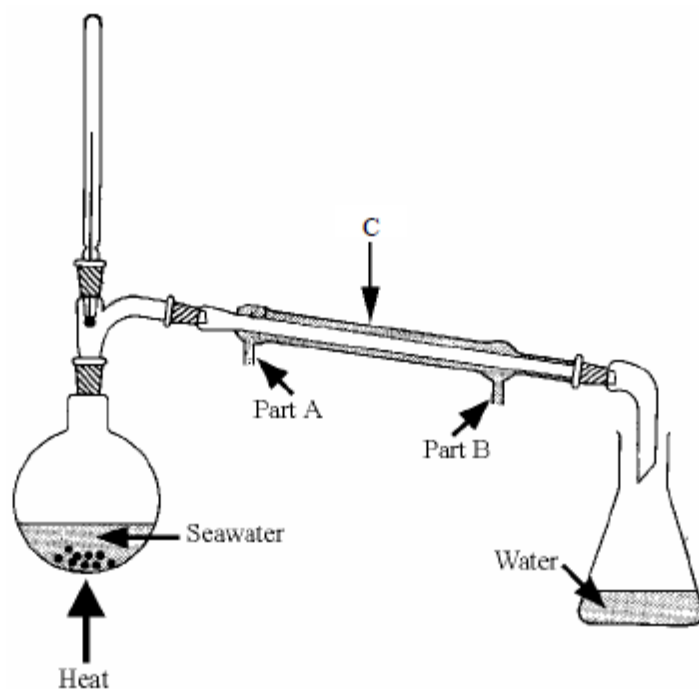


(ii) Draw a *labelled diagram*, in the box provided, of the item that you have named in (i) above. (6)



Q5 Part (c) 2009

(c)



(i) Name the *separation process* shown in the diagram. (3)

Name \_\_\_\_\_

(ii) Name the *item labelled C* in the diagram. (3)

Name \_\_\_\_\_

(iii) Identify the *part A or B of item C* which is connected to the cold tap. (3)

Identify \_\_\_\_\_

(iv) How could you show that the water collected contains no salt? (3)

How? \_\_\_\_\_

**Q6 Part (c) 2008**

- (c) (i) Describe an experiment, using a labelled diagram in the box provided, to investigate the *composition of inks in markers containing water-soluble inks*, to see if they are a *single-colour* ink or a *mixture* of coloured inks.

(9)

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- (ii) On completion of the experiment how is it possible to distinguish between a marker containing a *pure single-colour* ink and a marker containing *mixture* of coloured inks.

(3)

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**Q4 Part (h) 2007**

(h) The apparatus shown in the diagram can be used to separate mixtures.

Name *part A*.

Part A \_\_\_\_\_

Which connection, X or Y, is attached to the cold tap?

X or Y? \_\_\_\_\_

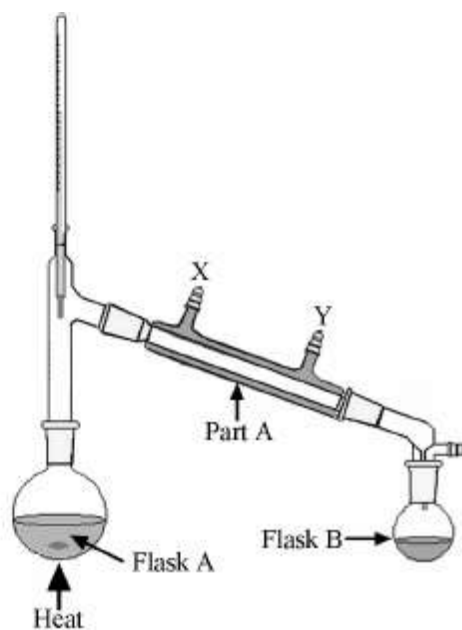
Flask A contains seawater. Name the *liquid* that collects in flask B.

Liquid \_\_\_\_\_

Name a *constituent* of seawater that does not move from flask A to flask B.

Name \_\_\_\_\_

(7 × 6 + 1 × 10)

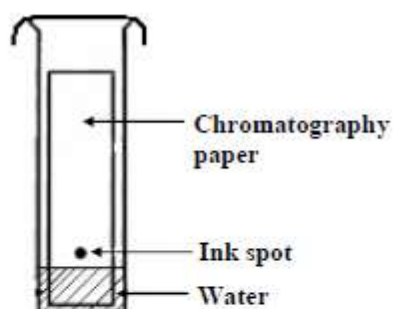


**Q5 Part (c) 2006**

(c) A spot of water-soluble ink was put on a piece of chromatography paper and set up as shown in the diagram. The ink used was a *mixture* of different coloured dyes.

(i) What happens to the ink spot as the water moves up the paper? (3)

\_\_\_\_\_  
\_\_\_\_\_



(ii) What would happen to a spot of water-soluble ink consisting of a *single coloured dye* if it were used in the above experiment? (3)

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