

**SEMESTER TWO 2018**

**Mixtures Test**

**ANSWER BOOKLET**

**NAME:**

**FORM:** **DATE:**

Multiple Choice Short Answer Total

**/20**

**/10**

**/30**

**SECTION ONE:** Multiple choice answers

Cross (X) through the correct answer.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1** | a | b | **XXX** | d |
| **2** | a | b | c | **XXX** |
| **3** | a | b | **XXX** | d |
| **4** | a | b | c | **XXX** |
| **5** | a | **XXX** | c | d |
| **6** | a | b | **XXX** | d |
| **7** | a | **XXX** | c | d |
| **8** | a | b | **XXX** | d |
| **9** | **XXX** | **b** | c | d |
| **10** | **XXX** | **b** | c | d |

**SECTION TWO: Short Answer (20 marks)**

Answer the questions in the spaces provided.

1. a) Distillation is a much more difficult method than Evaporation. Why would people use distillation over evaporation? (1 mark)  
     
   Distillation keeps the water  
     
   b) Filtration is a much slower method than Decantation. Why would people use filtration over decantation? (1 mark)  
     
   Filtration is much more effective at the separation
2. Wax is a solid that does NOT dissolve in water.  
   Wax does dissolve in kerosene.  
   Sugar does dissolve in water.  
   Sugar does NOT dissolve in kerosene.  
   Kerosene does NOT dissolve in water (3 marks)

1. a) **Identify** the solvent you would use to make a solution containing wax.

**Kerosene**

1. b) **Identify** two substances that are insoluble in water.

**Wax and kerosene**

1. c) **Identify** a substance that is soluble in water.

**Sugar**

1. When cooking rice it is important to wash the rice in water to remove the starch on the rice grains. After washing the rice the water is removed by pouring off the water.   
   What type of separation is this? (1 mark)

**Decantation**

1. Look at the information below then answer the questions that follow: (6 marks)

**Substance A**

**Substance A is dissolved in substance B.**

**Substance B**

1. What is substance A known as?

**Solute**

1. What is substance B known as?

**Solvent**

1. What is the mixture of substances A and B known as?

**Solution**

1. If only a small amount of substance A dissolved, how is the mixture described?

**Dilute**

1. If a large amount of substance A is dissolved, how is the mixture described?

**Concentrated**

1. If the maximum possible amount of substance A is dissolved, what is the mixture described as?

**Saturated**

1. Filtration is used widely around the home and all around us.  
   Give two examples of filters used in every-day life. (2 marks)

FILTER A **Any reasonable example e.g. water filter , tea filter**

FILTER B

1. Evaporation is a technique used to separate substances
2. What type substances would evaporation be used to separate? (1 mark)  
     
     
   soluble substances from a solvent
3. Can you give an example? (1 mark)  
     
     
   any reasonable answer. Salt and water
4. Draw a scientific diagram showing evaporation separating substances.

0.5 mark out of 2

Drawing done in pencil  
drawing done with ruler  
Drawing done in 2D and simple  
drawings are labelled

-0.5 marks out of max 2 if any are missing  
Busnen burner  
heatproof mat  
tripod  
evaporative basin (beaker is also acceptable)  
clay triangle (if used beaker then Gauze mat is also acceptable) (4 marks)