|  |
| --- |
| **Q1.**          Olive oil is used to make salad dressings and margarine.(a)     Vinegar is often used to make salad dressings.Vinegar contains 95% water and 5% ethanoic acid.http://content.doublestruck.eu/getPicture.asp?sub=AG_CHEM&CT=Q&org=&folder=Q12S1H06_files&file=14_img01.pngTo make a simple salad dressing add olive oil to vinegar and shake. After a few minutes the mixture separates.To make a French salad dressing add mustard to the olive oil and vinegar and shake.After several minutes the mixture does **not** separate.(i)      Why does the mixture in the simple salad dressing separate?..............................................................................................................................................................................................................................**(1)** |

|  |
| --- |
| (ii)     Mustard in the French salad dressing has molecules with hydrophilic properties and hydrophobic properties.Explain why the French salad dressing does **not** separate.You may include a diagram to help you to answer this question.........................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................**(3)** |

|  |
| --- |
| (b)     Olive oil contains 89% unsaturated fats and 11% saturated fats.What is the test and the result for unsaturated fats?................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................**(2)** |

|  |
| --- |
| (c)     Olive oil is hardened to make margarine.Describe the reaction and conditions needed to harden a vegetable oil.................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................**(3)****(Total 9 marks)**  |