Topic 9 – Analysis of Organic Compounds (paper 2 only)

* I can identify functional groups using reactions in the specification.
* I can use chemical tests to distinguish between aldehydes and ketones including Fehling’s solution and Tollens’ reagent
* I can use mass spectrometry can be used to determine the molecular formula of a compound (by using precise atomic masses and the precise molecular mass)
* I can explain that bonds in a molecule absorb infrared radiation at characteristic wavenumbers
* I can explain how ‘Fingerprinting’ allows identification of a molecule by comparison of spectra
* I can use infrared spectra and the Chemistry Data Sheet or Booklet to identify particular bonds, and therefore functional groups, and also to identify impurities
* I can explain the link between absorption of infrared radiation by bonds in CO2, methane and water vapour and global warming.