# **Module F324 Definitions**

### **Topic 1 - Arenes**

Electrophile electron pair acceptor

Substitution a reaction in which one atom or group is replaced by another

atom or group

### Topic 2 - Carbonyl Compounds/Carboxylic Acids and Esters

Nucleophile lone pair donor

Addition a reaction in which two molecules join to form one molecule

Hydrolysis reaction with water to split up a molecule

Triglyceride a tri-ester of glycerol and 3 fatty acids

# <u>Topic 3 - Nitrogen Compounds</u>

Zwitter ion an ion, typically found in amino acids, that has both a

positive and a negative charge

## **Topic 4 - Stereoisomerism and Organic Synthesis**

Stereoisomers same structural formula, different 3-dimensional

arrangement

Chiral centre a carbon atom bonded to four different atoms or groups

Optical isomers non-superimposable mirror images about an organic chiral

centre

Optical activity ability of chiral molecules to rotate plane-polarised light

#### **Topic 5 - Polymerisation**

Condensation polymerisation reaction between two different types of molecule to give a

polymer accompanied by the loss of a small molecule such as

water

#### **Topic 6 - Analysis**

Retention time the characteristic time it takes for a particular substance to

pass through the system under set conditions

R<sub>f</sub> value distance travelled by solute/distance travelled by solvent