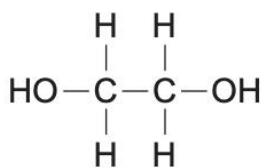
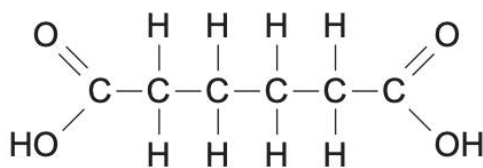


Question 28**(5 marks)**

Poly(ethylene adipate) is an inexpensive, biodegradable polymer. It is formed when ethylene glycol and adipic acid react. The structural formulae of these two monomers are shown below.



ethylene glycol



adipic acid

- (a) Draw the structural formula of poly(ethylene adipate). Show two repeating units. (2 marks)

- (b) Classify poly(ethylene adipate) according to the:

- (i) functional group or groups present in its structure. (1 mark)

- (ii) type of reaction resulting in its formation. (1 mark)

- (c) Identify a different type of reaction that results in the formation of a polymer. (1 mark)
