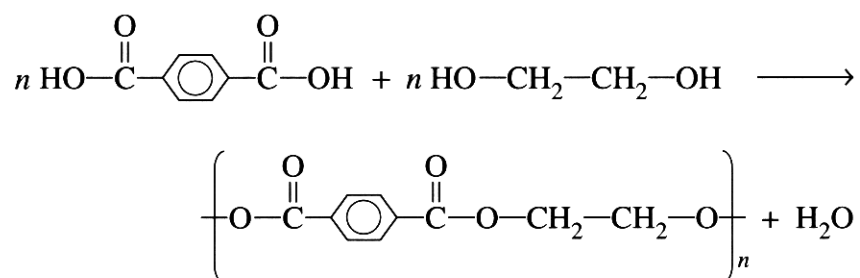


Question 18 (6 marks)

(a) Name the type of polymerisation shown in the following reaction:

1



..... condensation polymer

(b) Assess current developments in the use of biopolymers.

5

Biopolymers are polymers which are created partly or largely by living organisms. Their use has increased and these organisms have been used to create such plastics as polyethylene. Since the usage of crude oil & raw materials must be cut down due to its depleting supply the idea for biopolymers has come to aid in some renewable resources, these biopolymers are also being made to aid in biodegradability as recent plastics are not and can remain in the environment for years. More recent developments include the mixing of synthetic polymer with biopolymers so that the resulting materials are durable yet biodegradable. The scientific understanding of these has increased and scientists are moving towards the use of biopolymers and away from synthetics in an effort to better production and create environmentally friendly & available polymers.