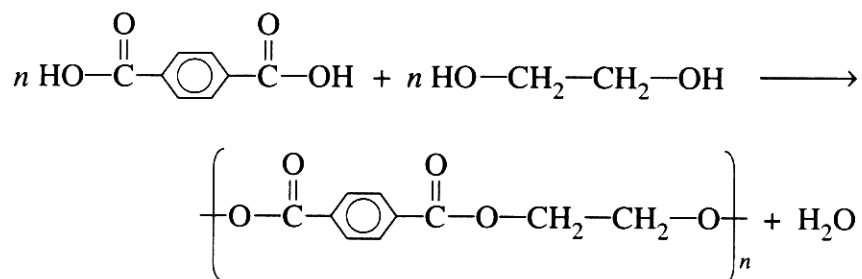


Question 18 (6 marks)

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

1



condensation polymerisation

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

5

Currently we produce synthetic polymers, which can be used for packaging of foods, etc. ~~and~~ ^{these} are not biodegradable and come from crude oil, which is not a renewable resource.

A current development ~~is the~~ involves ~~testin~~ ~~assessing~~ assessing the use of polymers made from the raw materials of biomass. For example, a food packaging is being developed which is starch-based. This allows the packaging to be decomposed once used, which reduces the filling up of garbage tips. It is also made from biomass, which is a natural ~~source~~ ~~and~~ renewable resource, ~~so~~ ~~the~~ meaning that ~~it~~ it won't run out and we can continue using it by planting more plants, unlike the polymers produced from crude oil.