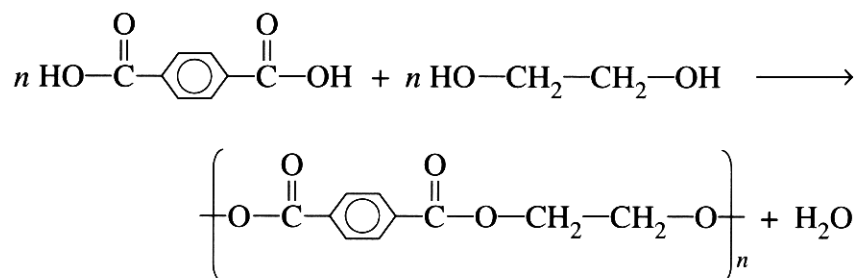


## Question 18 (6 marks)

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

1



.....condensation polymerisation.....

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

5

.....Biopolymers are polymers that have originated from natural sources, such as plants and micro-organisms. Biopolymers can have many uses, for example Rayon, which is a type of artificial silk made of cellulose from wood pulp or cotton. Recent developments in biopolymers include the use of micro-organisms such as bacteria. One example of the current developments of biopolymers is that of a new type of thread for stitches to be used for medicinal purposes. This biopolymer is strong and durable, but it is able to be dissolved by the body, is very safe to use, and is non-toxic. It can also be produced in large quantities.