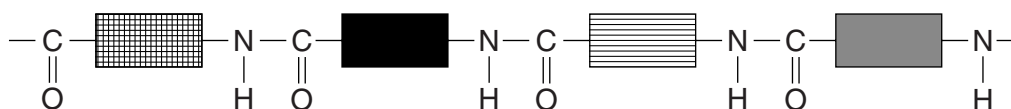
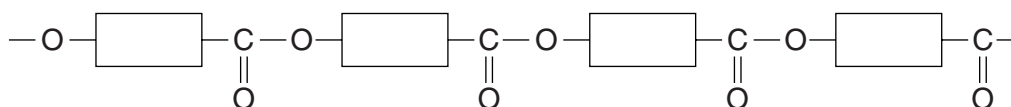


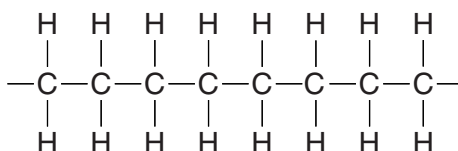
protein



polyester



poly(ethene)



Each polymer can be used once, more than once or not at all.

Which is a polymer that

(a) is made from propene,

..... [1]

(b) will form hydrogen chloride when combusted,

..... [1]

(c) can be hydrolysed to form amino acids,

..... [1]

(d) can be hydrolysed to make simple sugars,

..... [1]

(e) contains the same linkage as that present in a fat?

..... [1]

[Total: 5]

(iii) Use your answers to (i) and (ii) to calculate the concentration of sulfuric acid.

concentration of sulfuric acid = mol/dm³ [3]

(b) Describe the essential experimental details for preparing a pure sample of zinc nitrate crystals from zinc oxide.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [4]

[Total: 10]

(e) Describe how hydrogen is used to manufacture margarine.

.....
.....
.....
..... [2]

[Total: 10]

