

Q1.

Which statement concerning nylon-6,6 is correct?

- A** Butanedioic acid is one of the reactants used to make nylon-6,6 ☐
- B** Nylon-6,6 is an addition polymer. ☐
- C** Nylon-6,6 can be hydrolysed by aqueous sodium hydroxide. ☐
- D** All molecules of nylon-6,6 have the same relative molecular mass. ☐

(Total 1 mark)

Q2.

Which type of polymer is most difficult to hydrolyse?

- A** Polyalkene ☐
- B** Polyamide ☐
- C** Polyester ☐
- D** Protein ☐

(Total 1 mark)

Q3.

In which polymer does hydrogen bonding occur between the polymer chains?

- A** A polyalkene ☐
- B** A polyamide ☐
- C** A polychloroalkene ☐
- D** A polyester ☐

(Total 1 mark)

Q4.

Suberoyl chloride, $\text{ClOC}(\text{CH}_2)_6\text{COCl}$, is commonly used in the manufacture of polymers.

Which compound can form a polymer with suberoyl chloride?

A $\text{H}_2\text{NCH}_2\text{CH}_2\text{NH}_2$

☐

B $\text{ClOCCH}_2\text{COCl}$

☐

C $\text{CH}_3\text{CH}_2\text{CONH}_2$

☐

D $\text{HOOCCH}_2\text{COOH}$

☐

(Total 1 mark)

Q5.

Which polymer is **not** hydrolysed when heated with aqueous alkali?

A Kevlar

☐

B Nylon 6,6

☐

C Poly(propene)

☐

D Terylene

☐

(Total 1 mark)