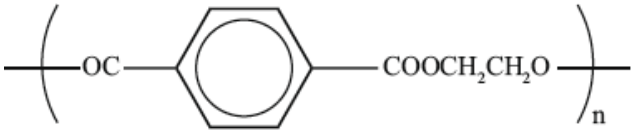
HL Paper 1

Which combination of monomers produces a condensation polymer with the repeating unit below?



A. C_6H_5COOH and $HOCH_2CH_2OH$

B. C_6H_5COOH and CH_3CH_2OH

C. $C_6H_4(COOH)_2$ and CH_3CH_2OH

D. $C_6H_4(COOH)_2$ and $HOCH_2CH_2OH$

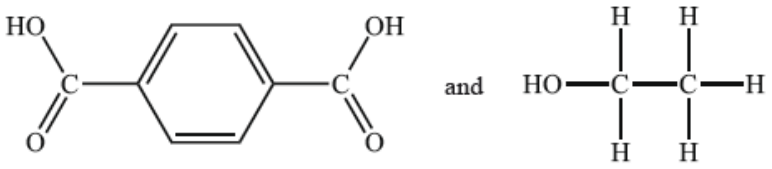
Markscheme

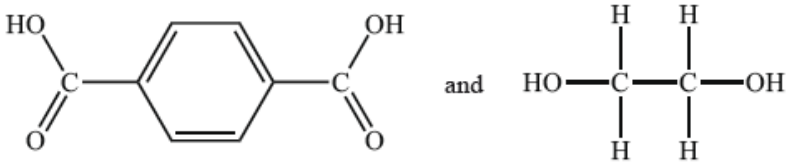
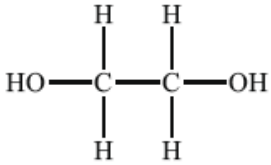
D

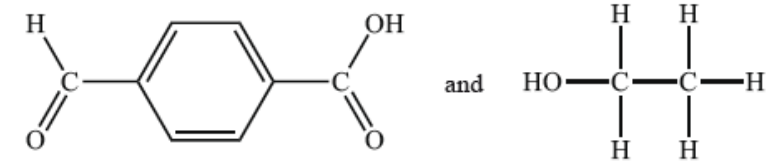
Examiners report

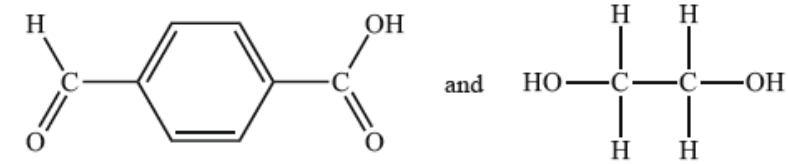
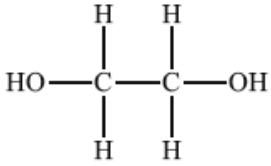
[N/A]

Which two compounds can form a polyester?

A.  and

B.  and 

C.  and

D.  and 

Markscheme

B

Examiners report

[N/A]

Which process can produce a polyester?

A. Addition polymerization of a dicarboxylic acid

B. Condensation polymerization of a diol and a dicarboxylic acid

C. Addition polymerization of a diol and dicarboxylic acid

D. Condensation polymerization of a dicarboxylic acid

Markscheme

B

Examiners report

[N/A]

Which pairs of compounds can react together to undergo condensation polymerization reactions?

I. $\mathrm{HOOC–C_6H_4–COOH}$ and $\mathrm{C_2H_5OH}$

II. $\mathrm{H_2N–(CH_2)_6–NH_2}$ and $\mathrm{HOOC–(CH_2)_4–COOH}$

III. $\mathrm{H_2N–CH_2–COOH}$ and $\mathrm{H_2N–CH(CH_3)–COOH}$

A. I and II only

B. I and III only

C. II and III only

D. I, II and III

Markscheme

C

Examiners report

[N/A]