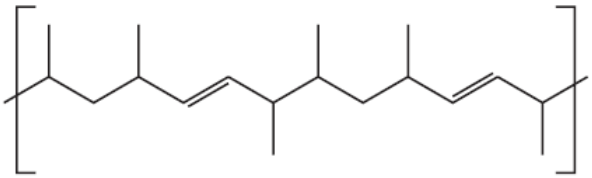
Polymerisation – 2022 June AS Chemistry 9701

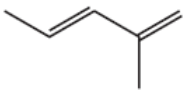
1. June/2022/Paper_11/No.39

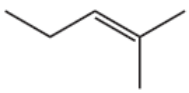
The diagram shows a section of an addition polymer formed from two different monomers.

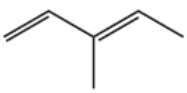


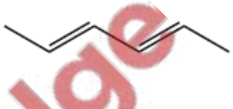
One of the monomers is propene.

What is the other monomer?

A 

B 

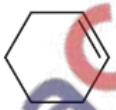
C 

D 

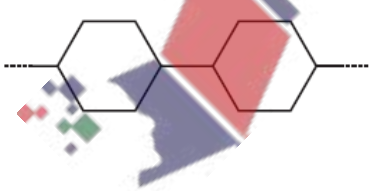
2. June/2022/Paper_12/No.39

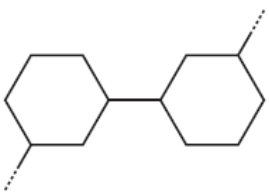
Cyclohexene, as shown in the diagram, can form an addition polymer.

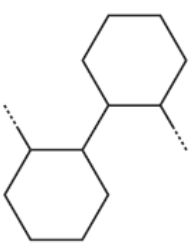
cyclohexene



Which structure represents a section of the polymer?

A 

B 

C 

D 

3. June/2022/Paper_13/No.40

One molecule of an addition polymer containing 2000 repeat units has an M_r of 112 000.

The polymer molecule contains chiral centres.

What is a possible monomer for this polymer?

A $CH_2=CHCH_3$

B $CH_2=C(CH_3)_2$

C $CH_2=CHCH_2CH_3$

D $CH_2=CHCH_2CH_2CH_3$

4. June/2022/Paper_22/No.4(c)

(c) **X** is an addition polymer.

X

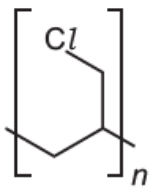


Fig. 4.3

(i) Draw the monomer of **X**.

[1]

(ii) Suggest **one** reason why the disposal of items made from **X** is difficult.

..... [1]