

Chemistry

Section I (continued)

Part B – 60 marks

Attempt Questions 16–27

Allow about 1 hour and 45 minutes for this part

Answer the questions in the spaces provided.

Show all relevant working in questions involving calculations.

Marks

Question 16 (6 marks)

You have carried out a first-hand investigation to compare the reactivity of an alkene with its corresponding alkane.

- (a) State the name of the alkene. 1

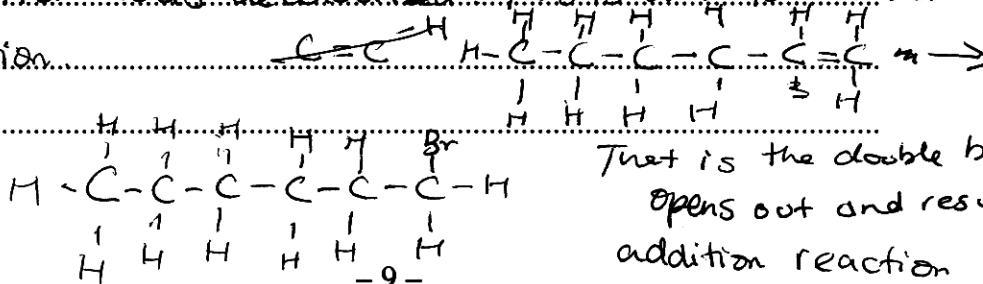
..... Hexene

- (b) Outline a procedure to compare the reactivity of this alkene with its corresponding alkane. 2

..... Take two alkanes: ~~cyclohexane~~ cyclohexane and hexane in two beakers
 Similarly
 Take two alkenes: cyclohexene and hexene in two beakers.
 Add bromine to one set of beakers and iodine in the other set of beakers.....

- (c) Describe the results obtained from this first-hand investigation and include relevant chemical equations. 3

..... In the case of the alkanes, no change in colour ~~of~~ was noted. However in the case of alkenes (cyclohexene and hexene) the ^{bromine} solution was decolourised. This is due to the addition reaction.....



That is the double bond opens out and results in addition reaction