

## 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

..... cyclohexene .....

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

..... Place a solution of bromine water into two beakers, then put a few drops of cyclohexene in one beaker and a few drops of cyclohexane in the other then observe what happens. ....

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

..... In the beaker with cyclohexane, no visible reaction occurred due to the saturated nature of the alkane. In the beaker with cyclohexene, the solution changed colour. ....

