STATISTICS (Q 7, PAPER 2)

2007

7 (a) Find the median of the numbers

5, 11, 3, 16, 8.

(b) The table below shows the time, in minutes, that customers were waiting to be served in a restaurant.

Time (minutes)	< 5	< 10	< 15	< 20	< 25
Number of customers	5	20	70	110	120

- (i) Draw a cumulative frequency curve (ogive).
- (ii) Use your curve to estimate the median waiting time.
- (iii) Use your curve to estimate the interquartile range.
- (c) The age of each person living in one street was recorded during a census. The information is summarised in the following table:

Age (in years)	0 - 20	20 - 30	30 - 50	50 - 80
Number of people	16	12	32	12

- (i) How many people were living in the street?
- (ii) Using mid-interval values, calculate the mean age.
- (iii) What is the greatest number of people who could have been aged under 40 years?

ANSWERS

- 7 (a) 8
 - (b) (ii) 14 mins (iii) 8 mins
 - (c) (i) 72 (ii) 35 (iii) 60