7. A bakery sells muffins individually at an average rate of 8 muffins per hour.

(a) Find the probability that, in a randomly selected one-hour period, the bakery sells at least 4 but not more than 8 muffins.

(3)

A sample of 5 non-overlapping **half-hour** periods is selected at random.

(b) Find the probability that the bakery sells fewer than 3 muffins in exactly 2 of these periods.

(5)

Given that 4 muffins were sold in a one-hour period,

(c) find the probability that more muffins were sold in the first 15 minutes than in the last 45 minutes.

(4)

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Question 7 continued

Question 7 continued

(Total for Question 7 is 12 marks)

TOTAL FOR PAPER IS 75 MARKS

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