

Q6

An ice cream shop would like to sell 4 different flavoured ice creams to its customers. The owner anticipates the following percentages of customers to select each flavour.

Selection	Vanilla	Chocolate	Coconut	Raspberry
Percentage	40%	25%	25%	10%

Of the first 100 customers, 35 select vanilla, 30 select chocolate, 30 select coconut, and 5 select raspberry.

Test, at the 10% level of significance, whether the observed distribution of orders differs from that which was expected.

Formulate and test the appropriate hypotheses. Use the critical value approach.