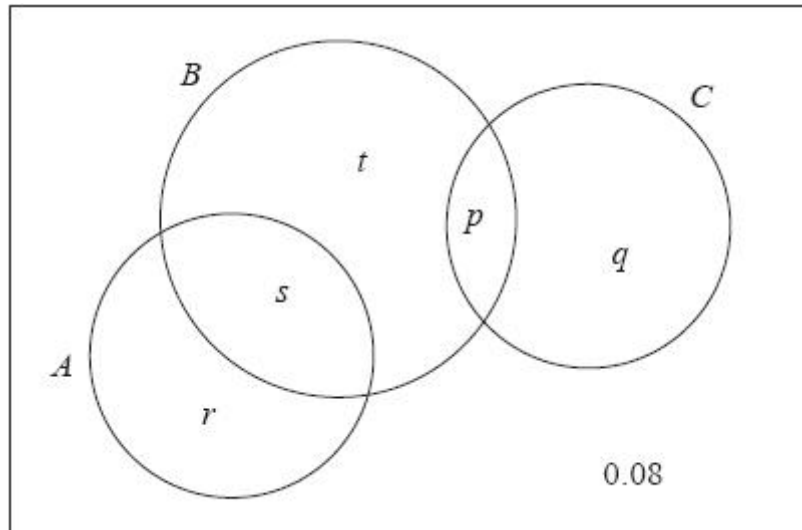


Daily Question – Applied Mathematics - Day 7

Topic Venn Diagrams

Question

The Venn diagram shows three events A , B and C , where p , q , r , s and t are probabilities.



$P(A) = 0.5$, $P(B) = 0.6$ and $P(C) = 0.25$ and the events B and C are independent.

(a) Find the value of p and the value of q .

(2)

(b) Find the value of r .

(2)

(c) Hence write down the value of s and the value of t .

(2)

(d) State, giving a reason, whether or not the events A and B are independent.

(2)

(e) Find $P(B | A \cup C)$.

(3)

(Total for question = 11 marks)