

EE23010 NCERT Exemplar

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Question 11.16.3.42

Match the proposed probability under Column C_1 with the appropriate written description under column C_2 :

Probability	Written Description
(a) 0.95	(i) An incorrect assignment
(b) 0.02	(ii) No chance of happening
(c) -0.3	(iii) As much chance of happening as not.
(d) 0.5	(iv) Very likely to happen
(e) 0	(v) Very little chance of happening

Solution:

From the first axiom of probability,

$$0 \leq \Pr(E) \leq 1 \quad (1)$$

- (a) 0.95 - (iv)
As the probability is closer to 1 compared to 0, it is very much likely to happen.
- (b) 0.02 - (v)
As the probability is closer to 0 compared to 1, it has very little chances of happening.
- (c) -0.3 - (i)
This does not satisfy the first axiom of probability. Hence, it is an incorrect assignment.
- (d) 0.5 - (iii)
As the probability is exactly between 0 and 1, it has the same chance of happening as to not happening.
- (e) 0 - (ii)
It is an impossible event. Hence, there is no chance of happening.