

CHAPTER 15

Probability

Properties of probability:

a) $P(E) + P(\overline{E}) = 1,$

$P(E)$ = Probability of occurrence of an event “E”.

$P(\overline{E})$ = Probability of non – occurrence of an event “E”.

b) The value of the probability of any event ranges from ‘0’ to ‘1’.

i.e. $0 \leq P(E) \leq 1$

(or)

Probability is a positive rational number less than or equal to “1”.

c) Probability of a definite (Sure) event is “1”.

d) Probability of an impossible event is ‘0’ i.e. $P(\phi) = 0.$

e) The sum of the probabilities of all possible outcomes of an experiment is always “1”.