

CHAPTER 16. PROBABILITY

Focus Area Based Practice Questions

1. Find probability of getting 53 “FRIDAYS” in a leap year
2. A card is drawn from a well shuffled pack of 52 playing cards. What is the probability of getting a red card or a king?
3. Seven cards are drawn from a pack of well shuffled 52 playing cards
 - i) How many ways this can be done?
 - ii) What is the probability that the selection contain all kings?
 - iii) What is the probability that selection does not contain a king card?
4. 3 cards are drawn from a well shuffled pack of 52 cards. Find the probability that
 - i) all the 3 cards are diamond.
 - ii) at least one of the cards is non-diamond.
 - iii) one card is king and two are jacks
5. If A and B are two events of a sample space with $P(A) = 0.54$, $P(B) = 0.69$, $P(A \cap B) = 0.35$, then find $P(A' \cap B')$
6. In a class of 60 students; 30 selected for NCC, 32 selected for NSS and 24 selected both NCC and NSS. If one of these students is selected at random, find the probability that:
 - i) the student selected for NCC or NSS.
 - ii) the student has selected neither NCC nor NSS.

7. Two students, Anil and Ashima appeared in an examination. The probability that Anil will qualify the examination is 0.05 and that Ashima will qualify the examination is 0.10. The probability that both will qualify the examination is 0.02. Find the probability that both will not qualify the examination.

8. The probability that Ramu will pass the examination in both mathematics and physics is 0.5, the probability of passing neither mathematics nor Physics is 0.1 the probability of passing mathematics is 0.75.
 - a) What is the probability of passing mathematics or physics?
 - b) What is probability of passing physics?

9. If $\frac{2}{11}$ is the probability of an event A, then what is the probability of the Event “not A” ?

10. If M and N are two events such that $P(M) = \frac{1}{4}$, $P(N) = \frac{1}{2}$ and $P(M \cap N) = \frac{1}{6}$. Find a) P (M or N)
 - b) P(not M and not N)

PROBABILITY FOCUS AREA VIDEO LINK:

<https://youtu.be/f5AW5RV9tt0>