



Question 31:

Total number of cards = 52

(i) There are 13 cards of spade (including 1 ace) and 3 more ace cards are there in a pack of cards

$$\therefore P(\text{getting a card of spades or an ace}) = \frac{16}{52} = \frac{4}{13}$$

(ii) There are 2 red kings in a pack of cards

$$\therefore P(\text{getting a red king}) = \frac{2}{52} = \frac{1}{26}$$

(iii) There are 4 kings and 4 queens in a pack of cards

$$\therefore P(\text{getting either a king or a queen}) = \frac{8}{52} = \frac{2}{13}$$

$$(iv) P(\text{getting neither a king nor a queen}) = \left(1 - \frac{2}{13}\right) = \frac{11}{13}$$

Question 32:

Face cards in a pack of cards are Jacks, Queens and Kings

The number of face cards =  $4 \times 3 = 12$

Total number of cards = 52

$$(i) \text{ Probability of getting a face card} = \frac{12}{52} = \frac{3}{13}$$

(ii) Number of red cards = 26

Number of king cards which are not red = 2

$$\therefore \text{probability of getting a red card or a black king card} = \frac{28}{52} = \frac{7}{13}$$

Probability of getting neither a red card nor a king

$$= 1 - \frac{7}{13} = \frac{6}{13}$$

Question 33:

Three cards King, Queen and Jack of club are removed

Remaining number of cards =  $52 - 3 = 49$

(i) Number of 'heart cards' = 13

$P(\text{heart card}) = 13/49$

(ii) Number of queens =  $4 - 1 = 3$

$P(\text{queen}) = 3/49$

(iii) Number of 'club cards' =  $13 - 3 = 10$

$P(\text{club cards}) = 10/49$

\*\*\*\*\* END \*\*\*\*\*