**Probability**

**Model 1: Tossing of Coins**

1. C:\Users\tsuser.PC\Desktop\final.pngWhen two coins are tossed simultaneously, what is the probability that both the coins show heads as output? 1) 2) 3) 4) 5) None of these
2. C:\Users\tsuser.PC\Desktop\final.pngWhen three coins are tossed simultaneously, what is the probability that two coins show tails as output? 1) 2) 3) 4) 5) None of these

**Model 2: Rolling of Dice**

1. C:\Users\tsuser.PC\Desktop\final.pngWhen an unbiased dice is rolled, what is the probability that the output is
2. 1 1) 2) 3) 4) 5) None of these
3. 2 1) 2) 3) 4) 5) None of these
4. A prime number 1) 2) 3) 4) 5) None of these
5. Greater than 2 1) 2) 3) 4) 5) None of these
6. When two dice are rolled together, what is the probability that the sum of the outputs is 8?   
   1) 2) 3) 4) 5) None of these

**Model 3: Conditional Selection of Balls/Caps/Marbles**

**C:\Users\tsuser.PC\Desktop\final.pngDirections (5 - 9):** Study the given information carefully and answer the questions that follow.

A box contains 6 red, 4 blue, 2 green and 3 yellow marbles.

1. If four marbles are picked at random, what is the probability that two are blue, one is green and one is yellow?   
   1) 2) 3) 4) 5) None of these
2. If three marbles are picked at random, what is the probability that all are red? 1) 2) 3) 4) 5) None of these
3. If two marbles are picked at random, what is the probability that either both are yellow or both are green?   
   1) 2) 3) 4) 5) None of these
4. If two marbles are picked at random, what is the probability that none is yellow? 1) 2) 3) 4) 5) None of these
5. If three marbles are picked at random, what is the probability that at least one is blue? 1) 2) 3) 4) 5) None of these

**Directions (10-14):** Study the following information carefully to answer the questions that follow.

A box contains 2 blue caps, 4 red caps, 5 green caps and 1 yellow cap.

1. If four caps are picked at random, what is the probability that none is green? 1) 2) 3) 4) 5) None of these
2. If two caps are picked at random, what is the probability that both are blue? 1) 2) 3) 4) 5) None of these
3. If one cap is picked at random, what is the probability that it is either blue or yellow? 1) 2) 3) 4) 5) None of these
4. If two caps are picked at random, what is the probability that at least one is red? 1) 2) 3) 4) 5) None of these
5. If three caps are picked at random, what is the probability that two are red that two are red and one is green? 1) 2) 3) 4) 5) None of these

**Directions (15-17):** Study the given information carefully and answer the questions that follow.

1. There are 3 green 4 red and 5 blue marbles in a bag. If three marbles are picked at random, what is the probability that either all are green or all are red?

1) 2) 3) 4) 5) None of these

1. If two marbles are drawn at random, what is the probability that both are red? 1) 2) 3) 4) 5) None of these
2. If three marbles are picked at random, what is the probability that at least one is blue? 1) 2) 3) 4) 5) None of these

**Model 4: Miscellaneous**

1. C:\Users\tsuser.PC\Desktop\final.pngThe probability that Rohan can solve a question is 3/4 and the probability that Sohan can solve it is 5/8. What is the probability that the question gets solved if both of them try it?

1) 2) 3) 4) 5) None of these

1. C:\Users\tsuser.PC\Desktop\final.pngA bag contains 5 red and 4 green balls and another bag contains 3 red and 7 black balls. If a ball is drawn from each bag. Find the probability that both are of different colors. 1) 2) 3) 4) 5) None of these
2. C:\Users\tsuser.PC\Desktop\final.png A Company has two Grids – Grid 1 and Grid 2. Out of 5 Directors and 4 General Managers of Grid 1, one person is transferred to Grid 2, which has 3 Directors and 7 General Managers. If one person is promoted from Grid 2, then what is the probability that this person is a director? 1) 2) 3) 4) 5) None of these

**Answers**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 - 4 | 2 - 2 | 3(i)-1 | 3(ii)-1 | 3(iii)-3 | 3(iv)-2 | 4 - 3 | 5 - 1 | 6 - 2 |
| 7 - 4 | 8 - 3 | 9 - 2 | 10 - 1 | 11 - 5 | 12 - 2 | 13 - 3 | 14 - 4 | 15 - 4 |
| 16 - 5 | 17 - 2 | 18 - 4 | 19 - 2 | 20 - 1 |