1. **MATHEMATICS**

**PROBABILITY**

1. In a cricket match probability of winning of India against Pakistan is 0.79. Then probability of loosing the match will be @0.23@0.21@0.14@0.36@ B
2. Probability that a non leap year should have 53 Mondays, will be@2/7@3/7@1/7@5/7@C
3. A number is chosen randomly among the first 100 natural numbers. Then the probability that the number chosen is multiple of 7, will be@7/50@7/15@7/29@3/13@ A
4. A bag contains 10 red balls and some white balls. If the probability of drawing a white ball is double that of a red ball, then number of white balls in the bag will be@10@15@20@ 25@ C
5. Each outcome of a sample space related to any random experiment is known as@compound event@elementary event@sure event@impossible event@ B
6. The king, queen and jack of hearts are removed from a deck of 52 playing cards and then well shuffled. One card is selected from the remaining cards. Then the probability of getting a king is @1/49@2/49@3/49@1@C
7. 12 defective pens are academically mixed with 132 good ones. It is not possible to just look at a pen and tell whether or not it is defective. One pen is taken out at random from this lot. Determine the probability that the pen taken out is a good one.@11/12@1/12@10/12@ 1/4@ A
8. 17 cards numbered 1, 2, 3, …. 16, 17 are put in a box and mixed thoroughly. One person draws a card from the box. Then the probability that the odd number on the card is@ 8/17@ 9/17@ 6/17@ 5/17@ B
9. Two coins are tossed simultaneously. Then the probability of getting at list one head is @ 1/4@ 1@ 3/4@0@ C
10. A die is thrown twice. Then the probability that 5 will come up at least once is@11/36@7/36@ 5/36@0@ A
11. Ina single throw of two dice, then the probability of getting a doublet of odd numbers is@ 11/12@ 1/12@ 5/12@ 5/6@ B
12. If the probability of wining a game is 0.7, then the probability of losing a game is@ 1/10@ 9/10@ 1@ 3/10@D
13. A bag contains 5 white balls and some red balls. If the probability of drawing a red ball is double that of a white ball, then the number of red balls in the bag is@7@8@10@9@ C
14. A card is drawn at random from a well shuffled pack of 52 cards. Then the probability that the card is neither a red card nor a queen is@ 6/13@ 5/13@ 11/13@ 4/13@A
15. There are 30 cards of the same size in a bag on which numbers 1 to 30 are written. One card is taken out of the bag at random. Then the probability that the number on the number on the selected card is not divisible by 3 is@ 1/3@ 3/4@ 2/3@ 1/4@C
16. If there coins are tossed simultaneously, then the probability of getting at least two heads, is@1/4@ 3/8@1/2@1/4@ C
17. A bag contains three green marbles four blue marbles, and two orange marbles. If marble is picked at random, then the probability that it is not a orange marble is@1/4@1/3@4/9@7/9@ D
18. A number is selected from number 1 to 27. The probability that it is prime is@2/3@1/6@1/3@2/9@C
19. IF (P)(E) = 0.05, then P (not E) = @-0.05@0.5@0.9@0.95@ D
20. A bulb is taken out at random from a box of 600 electric bulbs that contains 12 defective bulbs. Then the probability of a non-defective bulb is@0.02@0.98@0.50@None@ B
21. Hence, we have a tree diagram as shown 1.The probability of raining on day 1 is 0.2 and on day 2 is 0.3. What is the probability of raining on both the days?@0.2@0.1@0.06@0.25@ D
22. A bag contains 5 red balls and 8 balls. It also contains 4 green and 7 black balls. If a ball is drawn at random, then find the probability that is not green.@5/6@1/4@1/6@7/4@A
23. A bag contains 2 red, 3 green and 2 blue balls. 2 balls are to be drawn randomly. What is the probability that the balls drawn contain no blue ball?@5/7@10/21@2/7@11/21@ A
24. If the probability that A will live 15 years is and that B will live 15 years is then what is the probability that both will live after 15 years?@1/20@63/80@1/5@NONE@ B
25. Suppose six coins are flipped. Then the probability of getting at least one tail is -@71/72@53/54@63/64@1/12@ C
26. The probability that a student is not a swimmer is 1/5. Then the probability that out of the five students, four are swimmers, is–@<img src="26\_A1.gif" >@<img src="26\_A2.gif" >@<img src="26\_A3.gif" >@ NONE OF THESE@ B
27. A set A is containing n elements. A subset P of A is chosen at random. The set is reconstructed by replacing the elements of P. A subset of A is again chosen at random. The probability that P and Q have no common element is-@5<sup>N</sup>@<img src="27\_A1.gif" >@<img src="27\_A2.gif" >@2<sup>N</sup>@ A
28. If events A and B are independent and P@=0.15, P(A∪B)=0.45, then P@6/13@6/17@6/19@6/23@ B
29. One hundered identical coins each with probability p of showing up heads are tossed. If 0 < p < 1 and the probability of heads showing on 50 coins is equal to that of heads on 51 coins; then the value of p is -@1/2@49/101@50/101@51/101@ D
30. The probability that Kumar will hit a target is given as 1/5. Then, his probability of at least one hit in 10 shots is-@<img src="30\_A1.gif" >@<img src="30\_A2.gif" >@<img src="30\_A3.gif" >@<img src="30\_A4.gif" >@ B
31. Two dice are tossed. The probability that the total score is a prime number is -@1/6@5/12@1/2@7/9@ B
32. If the probability that A will live 15 years is and that B will live 15 years is then what is the probability that both will live after 15 years?@1/20@63/80@1/5@ NONE@ B
33. Hence, we have a tree diagram as shown 1.The probability of raining on day 1 is 0.2 and on day 2 is 0.3. What is the probability of raining on both the days?@0.2@0.1@0.06@ 0.25@ D
34. A bag contains 5 red balls and 8 balls. It also contains 4 green and 7 black balls. If a ball is drawn at random, then find the probability that is not green.@5/6@1/4@1/6@ 7/4@ A
35. A bag contains 2 red, 3 green and 2 blue balls. 2 balls are to be drawn randomly. What is the probability that the balls drawn contain no blue ball?@5/7@10/21@2/7@11/21@ A
36. If the probability that A will live 15 years is and that B will live 15 years is then what is the probability that both will live after 15 years?@1/20@63/80@1/5@ None@ B
37. Suppose six coins are flipped. Then the probability of getting at least one tail is @71/72@53/54@63/64@1/12@ C
38. The probability that a student is not a swimmer is 1/5. Then the probability that out of the five students, four are swimmers, is-@<img src="38\_A1.gif">@<img src="38\_A2.gif">@<img src="38\_A3.gif" >@ None of these@B
39. A set A is containing n elements. A subset P of A is chosen at random. The set is reconstructed by replacing the elements of P. A subset of A is again chosen at random. The probability that P and Q have no common element is -@5<sup>N</sup>@<img src="60\_A2.gif" ><img src="39\_A3.gif" >@ 2<sup>N</sup>@ A
40. If events A and B are independent and P@ = 0.15, P(A∪B) = 0.45, then P@ = \_\_\_\_\_\_\_\_@6/13@6/17@6/19@6/23@ B
41. One hundered identical coins each with probability p of showing up heads are tossed. If 0 <p<1 and the probability of heads showing on 50 coins is equal to that of heads on 51 coins; then the value of p is -@1/2@49/101@50/101@51/101@ D
42. The probability that Kumar will hit a target is given as 1/5. Then, his probability of atleast one hit in 10 shots is -@ <img src="42\_A1.gif" >@ <img src="42\_A2.gif" >@ <img src="60\_A3.gif" >@ <img src="60\_A4.gif" >@ B
43. Two dice are tossed. The probability that the total score is a prime number is -@1/6@5/12@1/2@7/9@ B
44. If the probability that A will live 15 years is and that B will live 15 years is then what is the probability that both will live after 15 years?@1/20@63/80@1/5@ None@ B
45. Four different objects 1, 2, 3, 4 are distributed at random in four places marked 1, 2, 3, 4. What is the probability that none of the objects occupy the place corresponding to its number?@17/24@3/8@1/2@ 5/8@ C
46. Three students try to solve a problem independently with a probability of solving it as 1/3, 2/5, 5/12 respectively. What is the probability that the problem is solved?@1/18@12/30@23/30@1/2@ C
47. If the probability of rain on any given day in Pune city is 50%, then what is the probability that it rains on exactly 3 days in a 5-day period?@8/125@5/16@8/25@2/25@ B
48. The probability that an even A happens in one trial of an experiment is 0.4. Three independent trials of the experiment are formed. The probability that the even A happens at least once is -@0.934@0.784@0.548@0.343@ B
49. A number is chosen at random among the first 120 natural numbers. The probability of the number chosen being a multiple of 5 or 15 is -@1/5@1/6@1/7@ 1/9@ A
50. From a pack of 52 playing cards, two cards are drawn together at random. Calculate the probability of both the cards being Kinds -@1/15@25/57@35/256@NONE@ D
51. What is the possibility of getting at least 6 heads if eight coins are tossed simultaneously?@ 37/256@25/57@1/13@NONE@ A
52. In a bag containing three balls, a white ball was placed, and then one ball was taken out at random. What is the probability that the extracted ball would turn out to be white, if all possible hypothesis concerning the colour of the balls that were initially in the bag were equally possible?@5/8@3/4@1/2@3/8@ A
53. From a box containing 60 standard and 40 substandard articles, two articles are chosen at random. What is the probability that one of them is standard and the other substandard?@ <img src="53\_A1.gif" >@ <img src="60\_A2.gif" >@16/33@24%@ C
54. From a normal pack of cards, a card is drawn at random. The probability of getting a jack or a king is -@5/52@1/52@2/13@NONE@ C
55. Two numbers are chosen from 1 to 5. The probability for the two numbers to be consecutive is -@1/5@2/5@1/10@2/10@ B