

# WANDOOR GANITHAM - S S L C UNIT TEST 2021

2.03AE

MATHEMATICS OF CHANCE

Total Score : 20

Time : 40 minutes

1. In a class there are 25 boys and 15 girls . One student is to be selected as leader .
  - a ) What is the probability that the class leader will be a girl ?
  - b ) What is the probability that the class leader will be a boy ? ( 2 )
2. Each letter of the word “ MALAYALAM “ is written on paper slips and put in a box .  
A slip is to be drawn from it .
  - a ) What is the probability of getting the letter A ?
  - b ) What is the probability of not getting the letter A ? ( 2 )
3. One is asked to say a three -digit number .
  - a ) How many three digit numbers are there ?
  - b ) What is the probability of getting a multiple of 100 ? ( 2 )
4. A bag contains 15 white and 25 green beads . Take one bead from this
  - a ) What is the probability of getting a green bead ?
  - b ) What is the probability of getting a white bead ?
  - c ) How many more white beads are to be put in the box to make the probability of getting a green bead is  $\frac{1}{2}$  ? ( 3 )
5. Numbers from 1 to 25 are written on slips of paper and put in a box . A slip is to be drawn from it .
  - a ) What is the probability that the number written in it is an even number ?
  - b ) What is the probability that the number written in it is an odd number ?
  - c ) What is the probability that the number written in it is a perfect square ? ( 3 )

6. A bag contains 6 white and 9 blue balls . In another box there are 8 white and 12 blue balls . Take one ball from this

a ) What is the probability of getting a white ball from the first bag ?

b ) What is the probability of getting a white ball from the second bag ?

c ) If all the balls are put in a single bag , what is the probability of getting a white ball from it ?

d) If all the balls are put in a single bag , the probability of getting a white ball is  $a$  and probability of getting a blue ball is  $b$  ,what is the relation connecting  $a$  and  $b$  ?

( hint :  $a$  and  $b$  are positive numbers ) ( 4 )

7. One is asked to say a two -digit number .

a) How many two digit numbers are there ?

b) What is the probability of getting a multiple of 5 ?

c ) What is the probability of getting a multiple of 10 ?

d) What is the probability of one of the digit being zero and the other being a prime ?

( 4 )