

**B.G.S International Public School**

**Sector -5, Dwarka New Delhi**

**Time: 1 hr.**

**Subject: Maths Test Paper 14**

**MM: 25**

**Class -X**

1. Given that  $HCF(306, 657) = 9$ , find LCM. [1]
2. Without actually performing the long division State whether the rational number will have terminating decimal or not.  $29/343$  [1]
3. Determine the probability of getting a total of eight in a single throw with two dice [1]
4. Prove that  $\sqrt{3}$  is irrational. [2]
5. If the mean of the following distribution is 27, find the value of p [2]

Class	0-10	10-20	20-30	30-40	40-50
frequency	8	p	12	13	10
6. Calculate median for the following data. [2]

Class interval	0-50	50-100	100-150	150-200	200-250	250-300
Frequency	4	8	16	13	6	3
7. One card is drawn from a well shuffled deck of 52 cards. Calculate the probability that the card will be (a) an ace (b) not an ace. [2]
8. A bag contains 8 red, 6 white & 4 black marbles. A marble is drawn at random. Find the probability that the marble drawn is (a) Red or white (b) Not black (c) neither white nor black [3]

9. The table below gives height of trees.

[3]

Height	No of trees
Less than 7	26
Less than 14	57
Less than 21	92
Less than 28	134
Less than 35	216
Less than 42	287
Less than 49	341
Less than 56	360

Draw 'less than' o give for the data.

10. Find the mode for the table below.

[3]

Age (in yrs):	5-15	15-25	25-35	35-45	45-55	55-65
No of students:	6	11	21	23	14	5

11. Calculate mean by deviation or step deviation method.

[5]

Marks	No of students
0-10	3
10-20	5
20-30	7
30-40	10
40-50	12
50-60	15
60-70	12
70-80	6
80-90	2
90-100	8