

Seven star International School Baru

class - 10<sup>th</sup>

Subject - Maths

Monday - Test

M.M. 30

(5x1=5)

Q.1 If HCF (a, b) = 19 and  $a \times b = 1800$ , then LCM(a, b) =  
a) 3600    b) 900    c) 150    d) 90

Q.2 Which of the following is a pair of coprimes?

a) (14, 35)    b) (18, 25)    c) (31, 93)    d) (32, 62)

Q.3 Determine prime factorisation of 20570

a)  $2 \times 5 \times 11^2 \times 17$     b)  $10 \times 11^2 \times 17$

c)  $5 \times 3^4 \times 191$     d)  $17 \times 10^2 \times 11$

Q.4 The sum of two numbers is 135 and their HCF is 27. If their LCM is 162, the numbers are.

a) 108, 27    b) 72, 54    c) 81, 54    d) 99, 36

Q.5 Assertion & Reason type:

Assertion :  $\sqrt{2}$  is an irrational number.

Reason : If  $p$  be a prime then  $\frac{1}{p}$  is an irrational number.

a) If both assertion and reason are true and reason is the correct explanation of assertion.

b) If both assertion & reason are true but reason is not the correct explanation of assertion.

c) If assertion is true but reason is false.

d) If assertion is false but reason is true.

Q.6 Prove that  $\sqrt{3}$  is irrational. (3)

Q.7 Find the largest number of four digits exactly divisible by 12, 15, 18 and 27. (3)

Q.8 The greatest number that will divide 103, 127 and 175, so as to leave remainder 55 in each case is. (3)

Q.9 Three numbers are in the ratio 1:2:3 and their HCF is 12. Then the positive square root of largest number. (3)



Shot on OnePlus

Guru hamirpuria | 2 May 2026 at 8:27 am

Test

Show that  $5 - 2\sqrt{3}$  is an irrational number. (3)

Find a quadratic polynomial each with the given numbers as sum and product of its zeroes 0,  $\sqrt{2}$  (2)

Q.12

Find the zeroes of the quadratic polynomial  $2x^2 + x - 15$  and verify a relationship b/w the zeroes and its coefficients. (4)

Q.13

Factorise  $2x^2 + 12\sqrt{2}x + 35$  and find the polynomial whose zeroes are twice of the given polynomials. (4)

