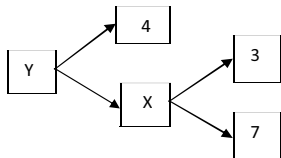# 1. REAL NUMBERS

1. The prime factor of $2 \times 7 \times 11 \times 17 \times 23 + 23$ is _____

2. A Physical Education Teacher wishes to distribute 60 balls and 135 bats equally among a number of boys. The greatest nu-mber receiving the gift in this way are_____

3. The Values of X and Y in the given figure are _____

4. If the LCM of 12 and 42 is 10m+4, then the value of 'm' is _____

5. π is _____

6. $\log_{2015} 2015 =$ _____

7. The reciprocal of two irrational numbers is _____

8. The decimal expansion of 17/18 is _____

9. $2.54\overline{7}$ is _____

10. Decimal expansion of number $\dfrac{27}{2 \times 5 \times 7}$ has _____

11. The decimal expansion of 189/125 will terminate after _____

12. If $a = 2^3 \times 3$, $b = 2 \times 3 \times 5$, $c = 3^n \times 5$ and LCM
    $(a, b, c) = 2^3 \times 3^2 \times 5$, then n = _____

13. If n is any natural number, then $6^n - 5^n$ always ends with _____

14. If $\log_2 16 = x$ then x= _____

15. The standard base of a logarithm is _____

16. If $\log_{10} 2 = 0.3010$, then $\log_{10} 8 =$ _____

17. $\log_{10} 0.01 =$ _____

18. The exponential form $\log_4 64 = 3$ is _____

19. $\log 15 =$ _____

20. The prime factorization of 216 is _____

21. HCF of 4 and 19 is _____

22. LCM of 10 and 3 is _____

23. If the HCF of two numbers is '1' , then the two numbers are called

____

24. If the positive numbers a and b are written as $a = x^5y^2$, $b = x^3y^3$ where x and y are prime numbers then the HCF(a, b) = ____; LCM (a,b) = ____

25. The product of two irrational numbers is ____

26. $43.\overline{1234}$ is ____ number.

27. $\log a^p.b^q$ = ____

28. If $5^3 = 125$, then the logarithm form ____

29. $\log_7 343$ = ____

ANSWERS

1) 23; 2) 15; 3) X = 21, Y = 84; 4) 8;

5) An irrational number; 6) 1; 7) Always an irrational number;

8) 2.125; 9) A rational;

10) non-terminating but repeating; 11) 3 places of decimal; 12) 2;

13) 1; 14) 4; 15) 10; 16) 0.9030; 17) – 2; 18) $4^3 = 64$; 19) log3 + log 5; 20) $2^3 \times 3^3$; 21) 1; 22) 30; 23) Co-Primes; 24) $[x^3y^2; x^5y^3]$; 25) Sometimes rational, Some times irrational; 26) a rational number; 27) plog a+q logb; 28) $\log_5 125 = 3$; 29) 3.