ARITHMETIC

Number System & LCM and HFC Worksheet

For students preparing for MAH-B.BCA/BBA/BMS/BBM CET 2024 for admission to BCA, BBA, BMS, BBM

---

1. What smallest number should be subtracted from 9805 so that it is divisible by 8?
   - A. 3
   - B. 4
   - C. 5
   - D. 7

2. A number is divided by 10 gives a remainder 7. If the same number is divided by 5, then what will be the remainder?
   - A. 1
   - B. 2
   - C. 3
   - D. 4

3. Which one of the following value of 'n' gives the negative result on $n^2 - 15$?
   - A. 7
   - B. 5
   - C. 3
   - D. 4

4. If 'n' is an integer, then which one of the following expression must be even?
   - A. $n(n + 1)$
   - B. $n^2 + 1$
   - C. $n(n + 2)$
   - D. $n(n + 4)$

5. What is the sum of first five prime numbers?
   - A. 18
   - B. 25
   - C. 26
   - D. 28

6. If the product of two consecutive even number is 288, then what are these numbers from following?
   - A. 14, 12
   - B. 14, 16
   - C. 16, 18
   - D. 22, 24

7. If 6 is subtracted from the cube of a number and the result is 21, then what is the value of that number?
   - A. 2
   - B. 3
   - C. 4
   - D. 5

8. The sum of the two digits of a two digit number is 12 and the difference between the two digits of the two digit number is 6. What is the two digit number?
   - A. 39
   - B. 84
   - C. 93
   - D. Cannot be determined

9. A certain number of two digits is three times the sum of its digits. If 45 is added to it, the digits are reversed. The number is
   - A. 72
   - B. 32
   - C. 27
   - D. 23

10. In a two digit number, the digit in the unit's place is twice the digit in the ten's place and the number obtained by interchanging the digits is more than the original number by 27. What is 50% of the original number?
    A. 36
    B. 63
    C. 48
    D. 18

11. Twice the square of a number is six times the other number. What is the ratio of the first number to the second?
    A. 1:4
    B. 2:5
    C. 1:3
    D. Cannot be determined

12. The sum of two numbers is 45 and their product is 500. Their HCF is
    A. 5
    B. 9
    C. 10
    D. 15

13. LCM of two numbers is 28 times their HCF. The sum of HCF and LCM is 1740. If one of these numbers is 240, the sum of digits of the other number is
    A. 4
    B. 5
    C. 6
    D. 7

14. HCF of three numbers 3240, 3600and p is 36. If their LCM is $2^4 \times 3^5 \times 5^2 \times 7^2$, then the number p is
    A. $2^2 \times 5^3 \times 7^2$
    B. $3^5 \times 5^2 \times 7^2$
    C. $2^2 \times 3^5 \times 7^2$
    D. $2^3 * 3^5 * 7^3$

15. The sum of three consecutive odd numbers and three consecutive even numbers together is 231. Also, the smallest odd number is 11 less than the smallest even number. What is the sum of the largest odd number and the largest even number?
    A. 82
    B. 83
    C. 74

    D. None of these

16. The LCM of two numbers x and y is 204 times their HCF. If their HCF is 12 and the difference between the numbers is 60, then x + y =?
    A. 660
    B. 426
    C. 852
    D. 348

17. The product of two numbers is 6845. If the HCF of the numbers is 37, then the greater number is:
    A. 111
    B. 37
    C. 148
    D. 185

18. What least value which should be added to 1812 to make it divisible by 7, 11 and 14?
    A. 12
    B. 36
    C. 72
    D. 154

19. The number of factors of 3600 is
    A. 45
    B. 44
    C. 43
    D. 43

20. How many numbers are therefrom 300 to 700 which are divisible by 2, 3 and 7?
    A. 7
    B. 8
    C. 9
    D. 10

21. The ratio of two numbers is 3:4 and their HCF is 5. Their LCM is:
    A. 10
    B. 60
    C. 15
    D. 12

22. If 4 is subtracted from square of a number, its result is 21. The number is,
    A. 5
    B. 4
    C. 6
    D. 3

23. Linear equation is also known as
    A. simultaneous equation
    B. first degree equation
    C. second degree equation
    D. zero degree equation

24. The HCF and LCM of two number are 4 and 80. One of the number is 4 more than the other. Find the smaller number
    A. 16
    B. 32
    C. 12
    D. 20

25. What will be the HCF of two consecutive even natural numbers?
    A. 5
    B. 4
    C. 3
    D. 2

26. In a two digit number, the digit in ten's place is four times the digit in the unit's place. Sum of the digits is equal to 10. What is the number?
    A. 14
    B. 41
    C. 82
    D. Data inadequate

27. LCM and HCF of two numbers is 120 and 10. Which of the following can be the sum of those two number?
    A. 140
    B. 80
    C. 60
    D. 70

Answer Key

1. C	2. B	3. C	4. A	5. D	6. C	7. B	8. C	9. C	10. D
11. D	12. A	13. C	14. C	15. D	16. D	17. D	18. D	19. C	20. C
21. B	22. A	23. B	24. A	25. D	26. C	27. D			