

Q1. Define:

- I. factor
- II. Multiple. Give five examples of each.

Q2. Write down all the factors of

- A. 20
- B. 36
- C. 60
- D. 75

Q3. What are the prime numbers? Give ten examples

Q4. Answer the following

- i. Write the smallest prime number.
- ii. List all even prime numbers
- iii. Write the smallest odd prime number

Q5. Find which of the following prime numbers are primes:

- (i) 87 (ii) 89 (iii) 63 (iv) 91

Q6. Answer the following

- A. Is there any counting number having no factor at all?
- B. Find all the numbers having exactly one factor.
- C. Find numbers between 1 and 100 having exactly three factors.

Q7. Test the divisibility of the following numbers by 2:

- a) 2650
- b) 69435
- c) 59628
- d) 789403
- e) 357986
- f) 367314

Q8. Test the divisibility of the following numbers by 4

- (i) 618

- (ii) 2314
- (iii) 63712
- (iv) 35056
- (v) 946126
- (vi) 810524

Q9. Test the divisibility of the following numbers by 5:

- (i) 4965
- (ii) 23590
- (iii) 35208
- (iv) 723405
- (v) 124684
- (vi) 438750

Q10. Test the divisibility of the following numbers by 11:

- (i) 4334
- (ii) 83721
- (iii) 66311
- (iv) 137269
- (v) 901351
- (vi) 8790322

Q11. Give the prime factorization of 252

Q12. Find the HCF of the numbers in each of the following, using the prime factorization method: 170, 238

Q13. Find the HCF of the numbers in each of the following, using the division method:
1045, 1520

Q14. Find the HCF and LCM of 693, 1078

Q15. Give the prime factorization of each of the following numbers: 945

Q16. Find the HCF of the numbers in each of the following, using the prime factorization method: 106,159,371

Q17. Find LCM of 16, 28, 40, 77

Q18. Which of the following are co-primes?

- (a) 8, 12
- (b) 9, 10
- (c) 6, 8
- (d) 15, 18

Q19. Which of the following is a composite number?

- (a) 23
- (b) 29
- (c) 32
- (d) None of these

Q20. The HCF of 144, 180 and 192 is

- (a) 12
- (b) 16
- (c) 18
- (d) 8

Q21. Which of the following are co-primes?

- (a) 39, 91
- (b) 161, 192
- (c) 385, 462
- (d) none of these

Q22. $\frac{289}{391}$ when reduced to the lowest terms is

- (a) $11/23$
- (b) $13/31$
- (c) $17/31$
- (d) $17/23$

Q23. The greatest number which divides 134 and 167 leaving 2 as the remainder in each case is

- (a) 14
- (b) 17
- (c) 19
- (d) 33