1. What is the GCD of 8 and 12?

1. 8
2. 12
3. 2
4. **4**

Explanation: GCD is largest positive integer that divides each of the integers. So the GCD of 8 and 12 is 4.

2. What is the GCD of 48, 18, 0?

1. 24
2. 2
3. 3
4. **6**

Explanation: GCD is the largest positive integer that divides each of the integers. So the GCD of 48, 18, 0 is 6.

3. Is 8 and 21 coprime numbers?

1. **True**
2. False

Explanation: Coprime numbers have GCD 1. So 8 and 21 are coprime numbers.

4. What is the abbreviation of LCM?

1. Latest Common Multiple
2. **Least Common Multiple**
3. Least Confirmed Multiple
4. None of the above

5. What is The LCM of 15 and 6?

1. 60
2. 90
3. **30**
4. 120

Explanation: Common Multiple of 15 and 6 are 30, 60, 90 …. And the lowest is 30. So LCM of 15 and 6 is 30

6. Which one is correct for 7! ?

1. 42 × 5 × 4 × 3 × 2 × 1
2. 7 × 6 × 5 × 4!
3. **Both a and b.**
4. None of the above.

Explanation: 7! = 7 × 6 × 5 × 4 × 3 × 2 × 1 . And we know that 4! = 4 × 3 × 2 × 1. That’s why we can replace the value 4 × 3 × 2 × 1 with 4! .Besides, 7 × 6 = 42 ..hence we can also replace 7 × 6 with 42.

7. Which one is correct for A= [11 0 7 -3] this matrix?

a)This is called row matrix.

b) A1,3 and A 1,1  is coprime.

c) Factorial of A1,2  is 1.

**d)All of the above.**

Explanation : The given matrix has only one row that’s why it is called row matrix, GCD of A1,3  and A1,1 is 1 that’s why they are coprime. And ,the value of A1,2  is 0 and we know 0! Is 1.

8) What is the cube root of 64?

1. 3
2. **4**
3. 5
4. 6

Explanation : Cube root of 64 is 4 .Because 4× 4× 4=64

9) Let, A={4,5,6} , B={6,12,18} Now what is the Union of set A and B?

1. {4,5,6,12}
2. 4,5,6,12,18
3. **{4,5,6,12,18}**
4. 6

Explanation :Union means both common and uncommon values of the given set. And set must be defined with {} this..that’s why the correct ans is c.

10) Combinatorics is -

1. A branch of Mathematics.
2. Deals with permutation and combination.
3. None of the above.
4. **Both a and b.**

Explanation : Answer is given in the module (5-3) from 12 minutes.