Q1) Four metal rods of lengths 78cm, 104cm, 117cm and 169cm are to be cut into parts of equal length. Each part must be as long as possible. What is the maximum number of pieces that can be cut?

a) 27
b) 36
c) 43
d) 480

Q2) A man has 4 copper rods whose lengths are 52m, 65m, 78m and 91m. This man wants to cut pieces of same length from each of four rods. What is the least number of total pieces, if he is to cut without any wastages?

a) 23
b) 24
c) 22
d) 20

Q3) A farmer has 1798 sheep and 986 lambs. He divides them into flocks by keeping sheeps and lambs separately, having the same number of animals in each flock. If the flocks should be as large as possible, then the total number of flocks is

a) 102
b) 48
c) 30
d) None of the above

Q4) A school has 378 girls student and 675 boy students. The school is divided into strictly boys or strictly girls sections. All sections of school have the same number of students. What are the minimum number of sections in the school?

a) 39
b) 40
c) 41
d) 38

Q5) Two equilateral triangles have the sides of lengths 34 and 85 respectively. The greatest length of tape that can measure both of them exactly is:

a) 17
b) 19
c) 13

d) 18

Q6) A milkman has 3 different qualities of milk. 403 gallons of 1st quality, 465 gallons of 2nd quality and 469 gallons of 3rd quality. Find the least possible number of bottles of equal size in which different milk of different qualities can be filled without mixing.

a) 34
b) 46
c) 26
d) 44

Q7) Two numbers P = $2^3.3^{10}.5$ and Q = $2^5.3.7$ are given. Find the GCD of P and Q.

a) 2.3.5.7
b) 3.2^2
c) $2^2.3^2$
d) $2^3 \cdot 3$

Q8) Find the ratio between the LCM and HCF of 5, 15 and 20.

a) 8:1
b) 14:3
c) 12:2
d) 12:1

Q9) There are 576 boys and 448 girls in a school that are to be divided into equal sections of either boys or girls alone. Find the minimum total numbers of sections thus formed

a) 24
b) 32
c) 16
d) 20

Q10) The LCM of two numbers is 1890 and their HCF is 30. If one of them is 270, the other will be

a) 210
b) 220
c) 310
d) 320

ANSWERS:

1 – B

2 – C

3 – B

4 – A

5 – A

6 – D

7 – D

8 – D

9 – C

10 – A