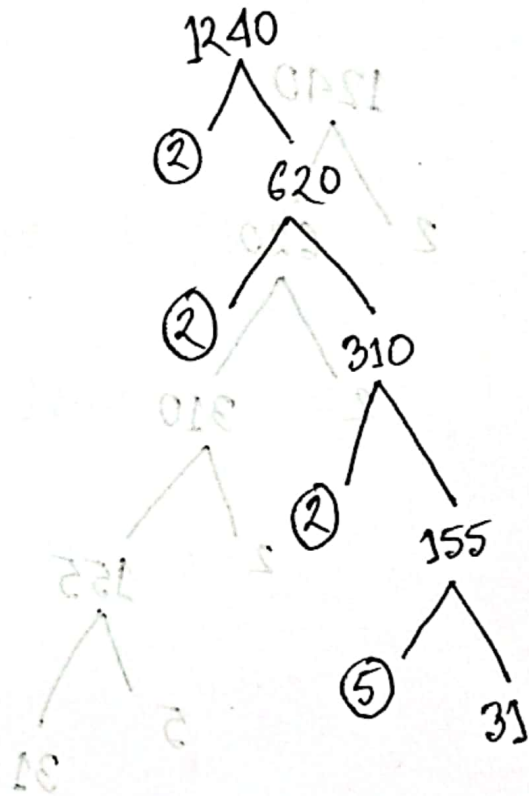


① Finding the prime factorization of 1240 using three different methods.

(i) Division method

$$\begin{array}{r}
 2 \overline{)1240} \\
 \underline{2} \quad 620 \\
 2 \overline{)620} \\
 \underline{2} \quad 310 \\
 5 \overline{)310} \\
 \underline{5} \quad 155 \\
 \underline{31}
 \end{array}$$

(ii) Tree diagram



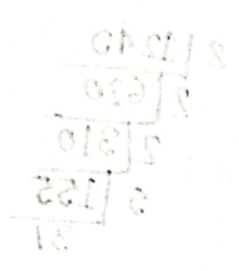
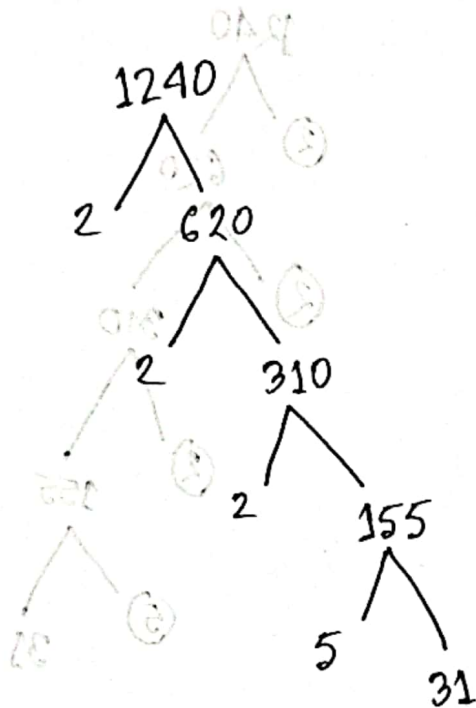
(iii) Multiplication method

$$\begin{aligned}
 1240 &= 2 \times 620 = 2 \times 2 \times 310 \\
 &= 2 \times 2 \times 155 \\
 &= 5 \times 3 \times 2^3
 \end{aligned}$$

There find the factorization of $1240 = 2^3 \cdot 5$

② Finding the all factors of 1240, using Tree diagram.

(i) Tree diagram



Therefore, the prime factorizations of 1240 = $2^3 \cdot 5 \cdot 31$

∴ So the total number of factors of 1240 is

$$\begin{aligned}
 &= 2^3 \cdot 5 \cdot 31 \\
 &= (3+1) \cdot (1+1) \cdot (1+1) \\
 &= 4 \cdot 2 \cdot 2 \\
 &= 16
 \end{aligned}$$

③ Finding the all prime factors of 1240

$$1240 = 2 \times 620 = 2 \times 2 \times 310 = 2^2 \times 2 \times 155 = 2^3 \cdot 5 \cdot 31$$

Therefore the prime factorization of 1240 is $= 2^3 \cdot 5 \cdot 31$

④ Finding the all composite factors of 1240

$$\begin{aligned} \text{Composite factors : } 1240 &= 2, 620, 310, 4, 8, 155, 5, 31 \\ &= 2, 4, 8, 5, 31, 155, 310, 620 \end{aligned}$$