<u>Real Numbers : Worksheet -12</u>

1. Which of the following rational number has a terminating decimal expansion?   [   ]

   [A] $\dfrac{169}{2^2 \times 3^3}$ [B] $\dfrac{723}{2^5 \times 5^3 \times 7}$ [C] $\dfrac{81}{2^3 \times 3^2 \times 5^2}$ [D] $\dfrac{161}{2^7 \times 7^2 \times 23}$

2. Two positive integers p and q can be expressed as $p = a^2b$, a and b being prime Numbers. LCM of p and q is: [   ]

   [A] ab [B] a^2b^2 [C] a^2b^3 [D] a^3b^3

3. Which of the following rational numbers have terminating decimal expansion?   [   ]

   [A] $\dfrac{11}{3000}$ [B] $\dfrac{91}{270}$ [C] $\dfrac{343}{2^3 \times 5^2 \times 7^3}$ [D] $\dfrac{31}{2^4 \times 3^5}$

4. The rational number between $\sqrt{2}$ and $\sqrt{3}$ is: [   ]

   [A] $\dfrac{6}{5}$ [B] $\dfrac{3}{4}$ [C] $\dfrac{3}{2}$ [D] $\dfrac{9}{5}$

5. The HCF of two numbers 'a' and 'b' is 5 and their LCM is 200, then the product of 'a' and 'b':   [   ]

   [A] 205   [B] 1000   [C] 200   [D] 195

6. Which of the following is a rational number?   [   ]

   [A] $\sqrt{10}$ [B] $\sqrt{12}$ [C] $\sqrt{14}$ [D] $\sqrt{16}$

7. The number of prime factors of 145 is: [   ]

   [A] 2   [B] 3   [C] 4   [D] 5

8. If two positive integers p and q can be expressed as $p = a^3b^2$ and $q = ab^3c^2$ and a, b, c being prime numbers, then HCF (p, q) is: [   ]

    [A] abc [B] ab^2 [C] $a^3b^3c^2$ [D] $a^2b^2c^2$

9. Which of the following numbers is an irrational number?   [   ]

    [A] $\dfrac{2}{7}$ [B] $2\sqrt{9}$ [C] $-3\sqrt{2}$ [D] 4.14

10. If the HCF of 65 and 117 is expressible in the form of $65m - 117$, then

    the value of m is: [   ]

    [A] 4   [B] 2   [C] 11   [D] 3

11. L.C.M of $2^2 \times 3^2$ and $2^2 \times 3^3$ is: [   ]

    [A] 2^3 [B] 3^3 [C] $2^3 \times 3^3$ [D] $2^2 \times 3^2$