

Exponents and Powers – Worksheet

I. Choose the correct answer:

1. The value of $3^5 \div 3^{-6}$ is

- (a) 3^5 (b) 3^{-6} (c) 3^{11} (d) 3^{-11}

2. The multiplicative inverse of 10^{-100} is

- (a) 10 (b) 100 (c) 10^{100} (d) 10^{-100}

3. If x be any non-zero integer and m, n be negative integers, then

$x^m \times x^n$ is equal to:

- (a) x^m (b) x^{m+n} (c) x^n (d) x^{m-n}

4. If x be any integer different from zero and m be any positive

integer, then x^{-m} is equal to:

- (a) x^m (b) $-x^m$ (c) $\frac{1}{x^m}$ (d) $\frac{-1}{x^m}$

5. The value of $(7^{-1} - 8^{-1})^{-1} - (3^{-1} - 4^{-1})^{-1}$ is:

- (a) 44 (b) 56 (c) 68 (d) 12

6. The standard form for 0.000064 is

- (a) 64×10^4 (b) 64×10^{-4} (c) 6.4×10^5 (d) 6.4×10^{-5}

7. The usual form for 2.03×10^{-5}

- (a) 0.203 (b) 0.00203 (c) 203000 (d) 0.0000203

8. $(1/10)^0$ is equal to

- (a) 0 (b) $1/10$ (c) 1 (d) 10

9. $(-9)^3 \div (-9)^8$ is equal to:

- (a) $(9)^5$ (b) $(9)^{-5}$ (c) $(-9)^5$ (d) $(-9)^{-5}$

10. If x be any integer different from zero and m, n be any integers,

then $(x^m)^n$ is equal to:

- (a) x^{m+n} (b) x^{mn} (c) $x^{m/n}$ (d) x^{m-n}