

## 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)  $64 \times 10^4$       (b)  $64 \times 10^{-4}$       (c)  $6.4 \times 10^5$       (d)  $6.4 \times 10^{-5}$

7. The usual form for  $2.03 \times 10^{-5}$

- (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)  $x^{m-n}$