

# Maths-7

## Chapter 5: Decimals –Worksheet

### A. Multiple Choice Questions (MCQs)

1.  $10^3$  equals:

- A) 30                      B) 300                      C) 1000                      D) 10

2. The base in  $5^4$  is:

- A) 5                      B) 4                      C) 9                      D) 1

3.  $(-2)^3$  equals:

- A) 6                      B) -6                      C) -8                      D) 8

4.  $3^5$  means:

- A)  $3 \times 5$                       B)  $5 \times 3$                       C) 3 multiplied five times                      D)  $3+5$

5. Which is greater?

- A)  $2^4$                       B)  $4^2$                       C) both equal                      D) none

### B. Fill in the Blanks

1. The exponent in  $7^3$  is \_\_\_\_\_.

2.  $10^2 =$  \_\_\_\_\_.

3. The reciprocal of  $2^3$  is \_\_\_\_\_.

4.  $5^0$  equals \_\_\_\_\_.

5.  $(-3)^2$  equals \_\_\_\_\_.

### C. Short Answer Questions

1. Express 125 as a power of 5.
2. Find the value of: (a)  $2^4$  (b)  $(-4)^3$
3. Which is greater:  $3^4$  or  $4^3$ ?
4. Simplify:  $2^2 \times 2^3$
5. Write in exponential form:  $3 \times 3 \times 3 \times 3$ .

### D. Word Problems

1. A bacteria doubles every hour. If it starts as 2, how many will be there after 5 hours?
2. A machine multiplies a number by 10 three times. If the number is 7, what is the final result?
3. A cube has edge length 4 cm. Express its volume in exponential form.
4. A tile pattern repeats 3 colours in powers of 2 steps. How many colours appear in  $2^4$  steps?
5. Express the mass of Earth (597000000000000000000000000 kg) in exponential form ( $10^n$ ).