



1. The base in the term  $3^2$  is

- (i) -3 (ii) 3 (iii) 2 (iv) -2 (v) 1

2. The exponent in the term  $2^4$  is

- (i) -4 (ii) 4 (iii) -2 (iv) 2

3. The power in the term  $2^8$  is

- (i) 5 (ii) -2 (iii) 2 (iv) -8 (v) 8

4. The base in the term  $\left(\frac{6}{5}\right)^5$  is

- (i) 5 (ii) -5 (iii)  $\frac{4}{5}$  (iv)  $\left(\frac{-6}{5}\right)$  (v)  $\frac{6}{5}$

5. The exponent in the term  $\left(\frac{7}{4}\right)^3$  is

- (i) -3 (ii) 1 (iii)  $\left(\frac{-7}{4}\right)$  (iv) 3 (v)  $\frac{7}{4}$

6. The power in the term  $\left(\frac{9}{2}\right)^4$  is

- (i) 1 (ii) 4 (iii) -4 (iv)  $\frac{9}{2}$  (v)  $\left(\frac{-9}{2}\right)$

7. Simplify the expression  $5^5 \times 5^5$

- (i)  $2^{10}$  (ii)  $8^{10}$  (iii)  $5^{10}$  (iv)  $5^{11}$  (v)  $5^9$

8. Simplify the expression  $(-7)^5 \times (-7)^5 \times (-7)^5$

- (i)  $(-7)^{14}$  (ii)  $(-7)^{15}$  (iii)  $(-10)^{15}$  (iv)  $(-7)^{16}$  (v)  $(-5)^{15}$

9. Simplify the expression  $8^6 \times 8^3 \times 8^7$

- (i)  $8^{15}$  (ii)  $10^{16}$  (iii)  $8^{17}$  (iv)  $8^{16}$  (v)  $6^{16}$

10. Simplify the expression  $(-2)^6 \times (-2)^3 \times (-2)^2$

- (i)  $(-2)^{10}$  (ii)  $(-2)^{11}$  (iii)  $(-4)^{11}$  (iv)  $(-2)^{14}$  (v)  $(-2)^{12}$

11. Simplify the expression  $7^3 \times 7^3$

- (i)  $49^3$  (ii)  $49^4$  (iii)  $49^2$  (iv)  $46^3$  (v)  $52^3$

12. Simplify the expression  $(-3)^3 \times (-7)^3 \times (-5)^3$

- (i)  $(-102)^3$  (ii)  $(-105)^4$  (iii)  $(-105)^3$  (iv)  $(-105)^2$  (v)  $(-108)^3$

13. Expand the following base power  $5^3$

- (i) 25 (ii) 512 (iii) 8 (iv) 625 (v) 125

14. Expand the following base power  $(-4)^5$

- (i) 256 (ii) 4096 (iii) -7776 (iv) -1 (v) -1024

15. Find the exponential notation of

$$7 \times 7 \times 7$$

- (i)  $4^3$  (ii)  $7^3$  (iii)  $9^3$  (iv)  $7^2$  (v)  $7^4$

16. Find the exponential notation of

$$-6 \times -6 \times -6 \times -6 \times -6 \times -6 \times -6$$

- (i)  $(-6)^6$  (ii)  $(-6)^8$  (iii)  $(-3)^7$  (iv)  $(-9)^7$  (v)  $(-6)^7$

17. Find the exponential notation of

$$-13 \times -13 \times -13$$

- (i)  $(-13)^2$  (ii)  $(-11)^3$  (iii)  $(-13)^3$  (iv)  $(-13)^4$  (v)  $(-16)^3$

18. Find the exponential notation of

$$13 \times 13 \times 13$$

- (i)  $13^4$  (ii)  $16^3$  (iii)  $13^3$  (iv)  $11^3$  (v)  $13^2$

Find the exponential notation of

19.  $\frac{9}{7} \times \frac{9}{7} \times \frac{9}{7}$

- (i)  $\left(\frac{9}{7}\right)^4$  (ii)  $\left(\frac{11}{7}\right)^3$  (iii) 1 (iv)  $\left(\frac{9}{7}\right)^3$  (v)  $\left(\frac{9}{7}\right)^2$

Find the exponential notation of

20.  $\frac{19}{17} \times \frac{19}{17} \times \frac{19}{17} \times \frac{19}{17} \times \frac{19}{17} \times \frac{19}{17} \times \frac{19}{17}$

- (i)  $\left(\frac{19}{17}\right)^7$  (ii) 1 (iii)  $\left(\frac{19}{17}\right)^6$  (iv)  $\left(\frac{19}{17}\right)^8$  (v)  $\left(\frac{21}{17}\right)^7$

Find the exponential notation of

21.  $\left(\frac{-2}{5}\right) \times \left(\frac{-2}{5}\right) \times \left(\frac{-2}{5}\right)$

- (i)  $\left(\frac{-2}{5}\right)^2$  (ii)  $\left(\frac{-2}{5}\right)^4$  (iii)  $\left(\frac{-2}{5}\right)^3$  (iv)  $\left(\frac{-2}{5}\right)^6$  (v)  $\left(\frac{-4}{5}\right)^3$

Find the exponential notation of

22.  $\left(\frac{-19}{12}\right) \times \left(\frac{-19}{12}\right) \times \left(\frac{-19}{12}\right)$

- (i)  $\left(\frac{-17}{12}\right)^3$  (ii)  $\left(\frac{-19}{12}\right)^4$  (iii)  $\left(\frac{-7}{4}\right)^3$  (iv)  $\left(\frac{-19}{12}\right)^3$  (v)  $\left(\frac{-19}{12}\right)^2$

23.  $-1^8 =$

- (i) undefined (ii) 0 (iii)  $\infty$  (iv) 1 (v) -1

24.  $-1^3 =$

- (i) 0 (ii)  $\infty$  (iii) 1 (iv) undefined (v) -1

25.  $10^0 =$

- (i) 1 (ii) -1 (iii)  $\infty$  (iv) undefined (v) 0

26.  $0^0 =$

- (i) undefined (ii) 0 (iii) -1 (iv)  $\infty$  (v) 1

27.  $-10^0 =$

- (i) 1 (ii)  $\infty$  (iii) 0 (iv) undefined (v) -1

28.  $0^3 =$

- (i) -1 (ii) 0 (iii) 1 (iv)  $\infty$  (v) undefined

## Assignment Key

1) (ii)	2) (ii)	3) (v)	4) (v)	5) (iv)	6) (ii)
7) (iii)	8) (ii)	9) (iv)	10) (ii)	11) (i)	12) (iii)
13) (v)	14) (v)	15) (ii)	16) (v)	17) (iii)	18) (iii)
19) (iv)	20) (i)	21) (iii)	22) (iv)	23) (iv)	24) (v)
25) (i)	26) (i)	27) (i)	28) (ii)		