

EduSahara™ Learning Center Assignment**Grade : Class VII, CBSE****Chapter : Exponents and Powers****Name : Miscellaneous Problems on Exponents****Licensed To : Teachers and Students for non-commercial use**

1. $(a^2)^2 =$

(i) a^2 (ii) a^4 (iii) 1 (iv) $2a^2$

2. $\frac{c^{19}}{c^4} =$

(i) c^{15} (ii) $4c^{15}$ (iii) c^{23} (iv) $19c^{15}$ (v) c^{76}

3. $(a^6b^2)^6 =$

(i) $a^{12}b^8$ (ii) $6a^{12}b^8$ (iii) $6a^{36}b^{12}$

(iv) $a^{36}b^{12}$ (v) $6a^6b^2$

4. $(-4s^6t^2)^3 =$

(i) $-64s^{18}t^6$ (ii) $-12s^9t^5$ (iii) $-4s^{18}t^6$

(iv) $-64s^9t^5$ (v) $-12s^{18}t^6$

5. $\left(\frac{d^{18}}{d^3}\right)^6 =$

(i) $6d^{21}$ (ii) $6d^{15}$ (iii) d^{90} (iv) d^{324} (v) d^{126}

6. $\left(\frac{m^8n^3}{o^3}\right)^6 =$

$$(i) \left(\frac{6m^8n^3}{6o^3} \right) (ii) \left(\frac{m^{48}n^{18}}{o^{18}} \right) (iii) \left(\frac{m^{14}n^9}{o^9} \right)$$

$$(iv) \left(\frac{m^{14}n^9}{o^{18}} \right) (v) \left(\frac{m^{48}n^{18}}{o^9} \right)$$

$$7. \frac{s^{15}t^{16}}{s^5t^2} =$$

$$(i) s^{10}t^{14} (ii) s^{20}t^{14} (iii) s^{20}t^{18} (iv) s^{31}t^7 (v) s^{10}t^{18}$$

$$8. \frac{u^8}{u^{14}} =$$

$$(i) \frac{1}{u^{112}} (ii) \frac{1}{u^{(-6)}} (iii) \frac{1}{u^6} (iv) u^6 (v) \frac{1}{u^{22}}$$

$$9. (x^5)^{(y+9)} =$$

$$(i) x^{(5y+14)} (ii) x^{(5y+45)} (iii) x^{(5y-45)}$$

$$(iv) x^{(y+19)} (v) x^{(y+50)}$$

$$10. \left(\frac{h^9}{i^2} \right)^k =$$

$$(i) \frac{i^{2k}}{h^{9k}} (ii) h^{9k} \cdot i^{2k} (iii) h^{9k} \cdot -i^{2k} (iv) \frac{h^{9k}}{i^{2k}}$$

$$11. \left(\frac{m^{15}}{m^9} \right)^8 =$$

$$(i) 8m^{48} (ii) m^{48} (iii) m^{15}$$

$$(iv) m^9 (v) m^{24}$$

12. $\left(q^{22q} \right)^5 =$

- (i) q^{110q} (ii) $q^{(22q+5)}$ (iii) $5q^{110q}$ (iv) q^{22q}

13. $(e+f)^{-9} \cdot (e+f)^2 =$

- (i) $(e+f)^{-9}$ (ii) $(e+f)^2$ (iii) $(e+f)^{-7}$ (iv) $(e+f)^{-11}$ (v) $(e+f)^{-18}$

14. $\frac{2b^{-7}}{3g^{-3}} =$

- (i) $\frac{3g^3}{2b^7}$ (ii) $\frac{2b^3}{3g^7}$ (iii) $\frac{3g^{-3}}{2b^{-7}}$ (iv) $\frac{2g^3}{3b^7}$ (v) $\frac{2g^{-3}}{3b^{-7}}$

15. $\left(c^{-6} + d^{-6} \right)^0 =$

- (i) 1 (ii) 3 (iii) $c^{-6} + d^{-6}$ (iv) (-1) (v) 0

Assignment Key

- 1) (ii)
- 2) (i)
- 3) (iv)
- 4) (i)
- 5) (iii)
- 6) (ii)
- 7) (i)
- 8) (iii)
- 9) (ii)
- 10) (iv)
- 11) (ii)
- 12) (i)
- 13) (iii)
- 14) (iv)
- 15) (i)