EduSahara™ Assignment

Name : Miscellaneous Problems on Exponents

Chapter : Exponents and Powers

Grade : CBSE Grade VII

1. $(n^4)^4 =$

(i) 1 (ii) n^8 (iii) n^4 (iv) n^{16} (v) $4n^4$

2. $\frac{v^{16}}{v^8} =$

(i) v^{24} (ii) v^{128} (iii) $16v^8$ (iv) v^8 (v) $8v^8$

3. $(j^6k^5)^9 =$

(i) $j^{54}k^{45}$ (ii) $j^{15}k^{14}$ (iii) $9j^6k^5$ (iv) $9j^{54}k^{45}$ (v) $9j^{15}k^{14}$

4. $(-5x^4y^6)^5 =$

(i) $-3125x^{20}y^{30}$ (ii) $-3125x^9y^{11}$ (iii) $-25x^9y^{11}$ (iv) $-25x^{20}y^{30}$ (v) $-5x^{20}y^{30}$

5. $\left(\frac{f^{10}}{f^4}\right)^3 =$

(i) $3f^{14}$ (ii) f^{120} (iii) $3f^6$ (iv) f^{42} (v) f^{18}

6. $\left(\frac{k^5l^5}{m^2}\right)^6 =$

(i) $\left(\frac{k^{30}l^{30}}{m^8}\right)$ (ii) $\left(\frac{k^{30}l^{30}}{m^{12}}\right)$ (iii) $\left(\frac{k^{11}l^{11}}{m^{12}}\right)$ (iv) $\left(\frac{6k^5l^5}{6m^2}\right)$ (v) $\left(\frac{k^{11}l^{11}}{m^8}\right)$

7. $\frac{v^{10}w^{13}}{v^9w^2} =$

(i) vw^{15} (ii) $v^{23}w^{11}$ (iii) vw^{11} (iv) $v^{19}w^{11}$ (v) $v^{19}w^{15}$

8. $\frac{p^8}{p^{11}} =$

(i) $\frac{1}{p^{88}}$ (ii) $\frac{1}{p^{19}}$ (iii) $\frac{1}{p^{(-3)}}$ (iv) $\frac{1}{p^3}$ (v) p^3

9. $(e^{4})^{(f+7)} =$

(i) $e^{(f+32)}$ (ii) $e^{(4f+28)}$ (iii) $e^{(f+15)}$ (iv) $e^{(4f+11)}$ (v) $e^{(4f-28)}$

10. $\left(\frac{r^{9}}{s^{3}}\right)^{t} =$

(i) $\frac{s^{3t}}{r^{9t}}$ (ii) $\frac{r^{9t}}{s^{3t}}$ (iii) $r^{9t}.s^{3t}$ (iv) $r^{9t}.-s^{3t}$

11. $\left(\frac{c^{14}}{c^{2}}\right)^{3} =$

(i) c^{14} (ii) c^{36} (iii) c^{2} (iv) c^{16} (v) $3\,c^{36}$

12. $\left(d^{11d}\right)^{9} =$

(i) $9\,d^{99d}$ (ii) $d^{(11d+9)}$ (iii) d^{11d} (iv) d^{99d}

13. $(g+h)^{3}.(g+h)^{(-3)} =$

(i) $(g+h)^{(-3)}$ (ii) $(g+h)^{(-9)}$ (iii) $(g+h)^{3}$ (iv) $(g+h)^{6}$ (v) 1

14. $\frac{3\,q^{(-8)}}{4\,u^{(-3)}} =$

(i) $\frac{4\,u^{(-3)}}{3\,q^{(-8)}}$ (ii) $\frac{4\,u^{3}}{3\,q^{8}}$ (iii) $\frac{3\,q^{3}}{4\,u^{8}}$ (iv) $\frac{3\,u^{(-3)}}{4\,q^{(-8)}}$ (v) $\frac{3\,u^{3}}{4\,q^{8}}$

15. $\left(d^{(-4)} + e^{(-4)}\right)^{0} =$

(i) 1 (ii) 3 (iii) $d^{(-4)} + e^{(-4)}$ (iv) (-2) (v) 0

Assignment Key

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