



1.  $[(-2)^{-2}]^{-2} =$

- (i)  $(-4)^4$  (ii)  $(-2)^5$  (iii)  $(-2)^4$  (iv) 1 (v)  $(-2)^3$

2.  $[6^5]^5 =$

- (i)  $6^{26}$  (ii)  $8^{25}$  (iii)  $6^{24}$  (iv)  $4^{25}$  (v)  $6^{25}$

3.  $\left[ \left( \frac{5}{3} \right)_7 \right]^3 =$

- (i)  $10^5$  (ii)  $7^6$  (iii)  $7^5$  (iv)  $7^4$  (v)  $4^5$

4.  $\left[ \left( \frac{5}{2} \right)_{(-4)} \right]^{3/2} =$

- (i)  $\left( \frac{15}{4} \right)_{(-6)}$  (ii)  $\left( \frac{7}{2} \right)_{(-4)}$  (iii)  $\left( \frac{15}{4} \right)_{(-2)}$  (iv)  $\left( \frac{9}{2} \right)_{(-4)}$  (v)  $\left( \frac{15}{4} \right)_{(-4)}$

5.  $[(-9)^2]^5 =$

- (i)  $(-9)^{11}$  (ii)  $(-6)^{10}$  (iii)  $(-9)^9$  (iv)  $(-9)^{10}$  (v)  $(-11)^{10}$

6.  $\left[ \left( \frac{-3}{7} \right)_{-5} \right]^{5/4} =$

- (i)  $\left( \frac{-5}{7} \right)_{(-25/4)}$  (ii)  $\left( \frac{-3}{7} \right)_{(-37/6)}$  (iii)  $\left( \frac{-3}{7} \right)_{(-25/4)}$  (iv)  $\left( \frac{-3}{7} \right)_{(-13/2)}$  (v)  $\left( \frac{-1}{7} \right)_{(-25/4)}$

7.  $\left[ \left( \frac{-2}{5} \right)_{(4/3)} \right]^4 =$

- (i)  $\left( \frac{-2}{5} \right)_{(26/5)}$  (ii)  $\left( \frac{-2}{5} \right)_{(16/3)}$  (iii)  $\left( \frac{-2}{5} \right)_{6}$  (iv)  $\left( \frac{-4}{5} \right)_{(16/3)}$

$$8. \left[ \left( \frac{-5}{9} \right)^{-2} \right]^5 =$$

- (i)  $\left( \frac{-5}{9} \right)^{-9}$  (ii)  $\left( \frac{-5}{9} \right)^{-10}$  (iii)  $\left( \frac{-7}{9} \right)^{-10}$  (iv)  $\left( \frac{-5}{9} \right)^{-11}$  (v)  $\left( \frac{-1}{3} \right)^{-10}$

$$9. [2^3]^{-5} =$$

- (i)  $2^{-15}$  (ii)  $(-1)^{-15}$  (iii)  $2^{-16}$  (iv)  $2^{-14}$  (v)  $4^{-15}$

$$10. [5^3]^{-4/5} =$$

- (i)  $5^{\left(\frac{-16}{7}\right)}$  (ii)  $3^{\left(\frac{-12}{5}\right)}$  (iii)  $7^{\left(\frac{-12}{5}\right)}$  (iv)  $5^{\left(\frac{-8}{3}\right)}$  (v)  $5^{\left(\frac{-12}{5}\right)}$

$$11. \left[ 2^{\left(\frac{-2}{5}\right)} \right]^2 =$$

- (i)  $2^{\left(\frac{-4}{5}\right)}$  (ii)  $2^{\left(\frac{-4}{7}\right)}$  (iii)  $(-1)^{\left(\frac{-4}{5}\right)}$  (iv)  $2^{\left(\frac{-4}{3}\right)}$  (v)  $5^{\left(\frac{-4}{5}\right)}$

$$12. \left[ 3^{\left(\frac{-3}{5}\right)} \right]^{-4} =$$

- (i) 1 (ii)  $3^{\left(\frac{8}{3}\right)}$  (iii)  $3^{\left(\frac{16}{7}\right)}$  (iv)  $3^{\left(\frac{12}{5}\right)}$  (v)  $5^{\left(\frac{12}{5}\right)}$

$$13. \left[ \left( \frac{-6}{7} \right)^2 \right]^3 =$$

- (i)  $\left( \frac{-6}{7} \right)^7$  (ii)  $\left( \frac{-8}{7} \right)^6$  (iii)  $\left( \frac{-4}{7} \right)^6$  (iv)  $\left( \frac{-6}{7} \right)^6$  (v)  $\left( \frac{-6}{7} \right)^5$

$$14. \left[ \left( \frac{-2}{7} \right)^{-3} \right]^{-2/3} =$$

- (i)  $\left( \frac{-2}{7} \right)^2$  (ii)  $\left( \frac{-4}{7} \right)^2$  (iii)  $\left( \frac{-2}{7} \right)^5$  (iv)  $\left( \frac{-2}{7} \right)^3$  (v)  $\left( \frac{-2}{7} \right)^3$

$$15. \left[ \left( \frac{9}{7} \right)^{-3/2} \right]^{-4} =$$

- (i)  $\left( \frac{9}{7} \right)^6$  (ii) 1 (iii)  $\left( \frac{9}{7} \right)^7$  (iv)  $\left( \frac{9}{7} \right)^5$  (v)  $\left( \frac{11}{7} \right)^6$

$$16. \left[ \left( \frac{8}{5} \right)^{5/4} \right]^{-2/5} =$$

- (i)  $\left( \frac{8}{5} \right)^{-1/4}$  (ii)  $2^{\left( \frac{-1}{2} \right)}$  (iii)  $\left( \frac{8}{5} \right)^{-1}$  (iv)  $\left( \frac{8}{5} \right)^{-1/2}$  (v)  $\left( \frac{6}{5} \right)^{-1/2}$

## Assignment Key

1) (iii)	2) (v)	3) (iii)	4) (v)	5) (iv)	6) (iii)
7) (ii)	8) (ii)	9) (i)	10) (v)	11) (i)	12) (iv)
13) (iv)	14) (i)	15) (i)	16) (iv)		