

**CLASS 8**  
**MATHEMATICS**  
**ANSWERS**  
**( EXPONENTS)**

**Question 1.**

$$\begin{aligned} \text{(i)} \quad & (2^{5-8})^5 \times 2^{-5} \\ & = (2^{-3 \times 5}) \times 2^{-5} \\ & = 2^{-15} \times 2^{-5} \\ & = 2^{-20} \end{aligned}$$

$$= 1/2^{20} \text{ Ans.}$$

$$\begin{aligned} \text{(ii)} \quad & 1^2/(2^3)^2 \\ & = 1/2^3 \times 2 \end{aligned}$$

$$= 1/2^6 \text{ Ans.}$$

**Question 2.**

$$\begin{aligned} \text{(i)} \quad & 2500 = 25 \times 100 = 25 \times 10^2 \\ & = [(25/10) \times 10] \times 10^2 \\ & = 2.5 \times (10 \times 10^2) = 2.5 \times 10^3 \text{ Ans.} \end{aligned}$$

$$\text{(ii)} \quad 0.8 = 8/10 = 8 \times 10^{-1} \text{ Ans.}$$

$$\begin{aligned} \text{(iii)} \quad & 0.0027 = 27/10000 = 27/10^4 \\ & = [(27/10) \times 10]/10000 \\ & = (2.7 \times 10)/10^4 = 2.7 \times 1/10^3 \\ & = 2.7 \times 10^{-3} \text{ Ans.} \end{aligned}$$