

2023-24

REVISION QUESTIONS

(Exponents & Powers)

CLASS - VII

MATHEMATICS

Time: 40 minutes



1. Write in expanded form [1]  
(a) 320501 (b) 10207
2. Write in standard form [1]  
(a) 123000000 (b) 12356.98
3. Write in usual form [1]  
(a)  $1 \times 10^7 + 3 \times 10^5 + 4 \times 10^3 + 8 \times 10^0$   
(b)  $2.5 \times 10^6$  (b)  $2.1967 \times 10^2$  (c)  $1.89 \times 10^4$
4. Express in exponential form [1]  
(a)  $x \times x \times x \times y \times y \times z$  (b)  $z \times z \times z \times t \times t$  (c) 3072 (d) 1155
5. Compare [2]  
(a)  $2^4 \square 4^2$  (b)  $1.2 \times 10^7 \square 2.9 \times 10^4$  (c)  $(-2)^{13} \square (-2)^{18}$  (d)  $2^{50} \square 50^2$
6. Evaluate (a)  $(-2)^3$  (b)  $(-1)^2 \times (-2)^3$  (c)  $7^2 \times 2^1$  (d)  $5^0 \times 5^3$  [2]
7. Express  $198 \times 132$  as product of its prime factors in exponential form [2]
8. Simplify using laws of exponents: [3]  
(a)  $\{[(1)^2]^3\}^{12}$  (b)  $(2^0 \times 3^0 + 4^0 - 5^0) \times 6^0$  (c)  $(2)^4 \times (3)^4$
9. Simplify using laws of exponents and write your answer in exponential form [3]  
(a)  $[(2^3)^3 \times 2^7] \div 2^{16}$   
(b)  $\frac{2^3 \times 2^4 \times 3^5}{(3^2)^2 \times (2^2)^3}$
10. Simplify, using laws of exponents [4]  
(a)  $\frac{12^3 \times 6^2 \times (2^3)^4}{81 \times 4^3}$   
(b)  $\frac{10^3 \times 15^2 \times 20^2}{6^2 \times 50^2}$