

Q 1. Simplify 2^2

- (a) 3 (b) 10 (c) 4 (d) 7

Q 2. The Exponent in the expression 3^7 is _____.

- (a) 1 (b) 7 (c) 0 (d) 3

Q 3. The value of 3^0 is _____.

- (a) 0 (b) 3 (c) 1 (d) None of these

Q 4. Multiplicative inverse of $1/7$ is _____.

- (a) 49 (b) 5 (c) 7 (d) -14

Q 5. Fill in the Blank $a^m \div a^n = a^{\dots\dots\dots}$ Where m and n are natural numbers:-

- (a) mn (b) $m + n$ (c) $m - n$ (d) $m \div n$

Q 6. Express $(2a)^4$ in exponential form.

- (a) $4a^3$ (b) $16a^4$ (c) $2a^4$ (d) $8a^4$

Q 7. The value of $1/3^2$ is equal to _____.

- (a) $1/9$ (b) 1 (c) -6 (d) $1/3$

Q 8. Find the value of 11^2

- (a) 22 (b) 9 (c) 121 (d) 13

Q 9. In simplified form $(3^0 + 4^0 + 5^0)^0$ is equals to

- (a) 12 (b) 3 (c) 12 (d) 1

Q 10. Find the value of $(2/3)^2$

- (a) $4/9$ (b) $-2/9$ (c) $9/4$ (d) 0

Q 11. In standard form 52,00,00,000 is equal to _____.

- (a) 5.2×10^7 (b) 5.2×10^8 (c) 52×10^8 (d) $52 \times 100,00,000$

Q 12. Usual form of the expression 10^4 is given by _____.

- (a) 100,00 (b) 1,0000 (c) 10×10^4 (d) 10,000

- Q 13. 1 micron is equals to _____ .
(a) $1/1000000$ m (b) 10^6 m (c) 10^5 m (d) 10^7 m
- Q 14. The approximate distance of moon from the earth is 384,467,000 m and in exponential form this distance can be written as _____ .
(a) $3.84,467 \times 10^8$ m (b) $384,467 \times 10^{-8}$ m (c) $384,467 \times 10^{-9}$ m (d) $3.844,67 \times 10^{-13}$ m
- Q 15. 7×10^{-5} m is the standard form of which of the following _____ .
(a) 0.0007 m (b) 0.000007 m (c) 0.0000007 m (d) 0.00007 m
- Q 16. The standard form of 4050000 is given by _____ .
(a) 4.05×10^6 (b) 40.5×10^9 (c) 405×10^6 (d) 4.05×10^{-6}
- Q 17. Which one of the following is the value of 1^{15}
(a) 0 (b) 15 (c) 1 (d) None of these
- Q 18. Fill in the blank : $(-1)^{\text{even number}} =$ _____ .
(a) $2 \times (-1)$ (b) 1 (c) 0 (d) -1^3
- Q 19. Fill in the blank : $(-1)^{\text{odd number}} =$ _____ .
(a) 1 (b) -1 (c) 2 (d) 0
- Q 20. Value of $(3^0 + 2^0) \times 5^0$ is
(a) 1 (b) 25 (c) 2 (d) 0
- Q 21. The value of 7^2 is _____ .
(a) 7 (b) 49 (c) 2 (d) 14
- Q 22. The Base in the expression 8^{10} is _____ .
(a) 10 (b) 2 (c) 8 (d) 800
- Q 23. The value of 100^0 is _____ .
(a) 0 (b) 100 (c) 1 (d) None of these
- Q 24. Find the number from the following expanded form : $9 \times 10^5 + 2 \times 10^2 + 3 \times 10^1$
(a) 900203 (b) 912351 (c) 905302 (d) 900230

Q 25. Value of $(2^3)^2$ is given by _____.

- (a) 64 (b) 32 (c) 12 (d) None of these

Q 26. The value of $7^2 \div 7^3$ is given by _____.

- (a) $\frac{1}{7}$ (b) 7 (c) $\frac{1}{14}$ (d) -7

Q 27. The value of $1/5^2$ is equal to _____.

- (a) -5 (b) 25 (c) -15 (d) $\frac{1}{25}$

Q 28. In exponential form 140,000,000,000 Kg is given by _____.

- (a) 1.4×10^{10} Kg (b) 1.4×10^9 Kg (c) 14×10^8 Kg (d) 1.4×10^{11} Kg

Q 29. The expression, $(5^2 + 7^2 + 3^2)^0$ is equals to

- (a) 15^6 (b) -6 (c) 1 (d) 83

Q 30. The value of $(1/6)^2$ is _____.

- (a) $\frac{1}{12}$ (b) $-\frac{2}{3}$ (c) $\frac{1}{36}$ (d) 2

Q 31. In standard form 56700000 is written as _____.

- (a) 5.67×10^7 (b) 567×10^7 (c) 5.67×10^5 (d) 567×100000

Q 32. Usual form of the expression 9×10^{-5} is given by _____.

- (a) 0.00009 (b) 0.000009 (c) 90×10^{-4} (d) 0.09×10^{-3}

Q 33. The number 86,800,000,000,000,000,000,000 Kg is equal to _____.

- (a) 8.68×10^{25} Kg (b) 868×10^{23} Kg (c) 86.8×10^{-25} Kg (d) 868×10^{-23} m

Q 34. Charge of an electron is 0.000,000,000,000,000,000,16 coulomb and in exponential form it can be written as _____.

- (a) 16×10^{-18} coulomb (b) 1.6×10^{-21} coulomb
(c) 1.6×10^{-19} coulomb (d) 16×10^{-21} coulomb

Q 35. 13×10^{-7} Km is the standard form of which of the following _____ .

- (a) 0.000000013 Km (b) 0.0000013 Km
(c) 0.0000000000013 Km (d) 0.00000000013 Km

Q 36. The standard form of 9,030,000,000 is given by _____ .

- (a) 9.03×10^9 (b) 90.3×10^7 (c) 903×10^6 (d) 9.03×10^{-9}

Q 37. Which one of the following is the value of 3^5

- (a) 3 (b) 15 (c) 2 (d) 243

Q 38. Find the value of $5^0 \times 7^0 \times 3^0$

- (a) 1 (b) $\frac{1}{24}$ (c) 6 (d) $\frac{1}{5} \times 7 \times 3$

Q 39. 64 in exponential form is _____ .

- (a) 2^6 (b) 16^2 (c) $1/8^2$ (d) 2^4

Q 40. The value of $2^0 \times 3^0 \times 4^0$ is

- (a) 1 (b) 0 (c) 24 (d) None of these

ANALYSIS

QUESTION NUMBERS	TALLY MARKS	CONCEPTS
2 , 17 , 22 , 24		Understanding of Base and Exponents
11 , 12 , 13 , 14 , 15 , 16 , 39 , 31 , 32 , 33 , 34 , 35 , 36		Ability to Express in Exponential Form
1 , 4 , 6 , 7 , 8 , 9 , 10 , 18 , 19 , 25 , 27 , 30 , 37		Simplification of Exponents
3 , 5 , 20 , 21 , 23 , 26 , 28 , 29 , 38 , 40		Applications of Laws of Exponents