

Unit 2

Logarithms

Sr. No.	Questions	A	B	C	D
1	The standard form of 5.2×10^6 is:	52,000	520,000	5,200,000✓	52,000,000
2	Scientific notation of 0.00034 is:	3.4×10^3	3.4×10^{-4} ✓	3.4×10^4	3.4×10^{-3}
3	The base of common logarithm is:	2	10✓	5	e
4	$\log_2 2^3 = \underline{\hspace{1cm}}$.	1	2	5	3✓
5	$\log 100 = \underline{\hspace{1cm}}$.	2✓	3	10	1
6	If $\log 2 = 0.3010$, then $\log 200$ is:	1.3010	0.6010	2.3010✓	2.6010
7	$\log(0) = \underline{\hspace{1cm}}$.	positive	negative	zero	undefined✓
8	$\log 10,000 = \underline{\hspace{1cm}}$.	2	3	4✓	5
9	$\log 5 + \log 3 = \underline{\hspace{1cm}}$.	$\log 0$	$\log 2$	$\log \frac{5}{3}$	$\log 15$ ✓
10	$3^4 = 81$ in logarithmic form is:	$\log_3 4 = 81$	$\log_4 3 = 81$	$\log_3 81 = 4$ ✓	$\log_4 81 = 3$

Solution of MCQs

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1	$5.2 \times 10^6 = 5,200,000$
2	$0.00034 = 3.4 \times 10^{-4}$
3	Common log base = 10
4	$\log_2 2^3 = ?$ $\log_2 2^3 = 3 \log_2 2$ $= 3(1)$ $= 3$
5	$\log 100 = ?$ $\log 100 = \log 10^2$ $= 2 \log 10$ $= 2(1)$ $= 2$
6	$\log 200 = ?$ $\log 200 = \log 2 \times 100$ $= \log 2 + \log 100$ $= 0.3010 + 2$ $= 2.3010$
7	$\log(0)$ is undefined
8	$\log 10,000 = ?$ $\log 10,000 = \log 10^4$ $= 4 \log 10$ $= 4(1)$ $= 4$
9	$\log 5 + \log 3 = \log 15$
10	$3^4 = 81 \Rightarrow \log_3 81 = 4$

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