

Name: _____	Subject: Math	Class: 9 th	Time: 60 minutes	Total Marks:	30
Unit Number: 3		MJDExpert.com		Obtained marks	

Q.No.1 Choose the correct Answer.(6 × 1 = 6)

1. If $a^x = n$ then:

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|-------------------|-------------------|-------------------|-------------------|
| a) $a = \log_x n$ | b) $a = \log_a x$ | c) $x = \log_n a$ | d) $x = \log_a n$ |
|-------------------|-------------------|-------------------|-------------------|

2. The logarithm of unity to any base is.

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|------|-------|------|------|
| a) 0 | b) 10 | c) 1 | d) e |
|------|-------|------|------|

3. $\log e = \dots$ where $e = 2.718$.

- | | | | |
|------|-----------|------|-------------|
| a) 0 | b) 0.4343 | c) 1 | d) ∞ |
|------|-----------|------|-------------|

4. $\log_b a \times \log_c b$ can written as:

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|---------------|---------------|---------------|---------------|
| a) $\log_b c$ | b) $\log_c a$ | c) $\log_a b$ | d) $\log_c b$ |
|---------------|---------------|---------------|---------------|

5. Anti-logarithm table was prepared in:

- | | | | |
|---------|---------|---------|---------|
| a) 1620 | b) 1621 | c) 1520 | d) 1530 |
|---------|---------|---------|---------|

6. $(\log m)^n$ can be written as.

- | | | | |
|-----------------|---------------|---------------|------------------|
| a) $(\log n)^m$ | b) $n \log m$ | c) $m \log n$ | d) None of these |
|-----------------|---------------|---------------|------------------|

Q.No.2: Give the Short Answers.(8 × 2 = 16)

i. Find "x" if $\log x = 0.1821$

ii. Write into ordinary Notation 5.06×10^{10} .

iii. Find value of x when $\log_{64} x = -\frac{2}{3}$

iv. Define anti logarithm.

v. Simplify $\log_{3^2} \times \log_{2^{81}}$.

vi. If $\log 2 = 0.3010$ $\log 3 = 0.4771$ and $\log 5 = 0.6990$ find $\log \sqrt{24}$.

vii. Write in the form of single logarithm $2 \log x - 3 \log y$.

viii. Define scientific logarithm.

Q.No.3: Give the long answers.(4 + 4 = 08)

a) Evaluate $\sqrt[3]{\frac{0.07921 \times (18.99)^2}{(5.79)^4 \times 0.9474}}$

b) Use log table to find the value of $\frac{(438)^3 \sqrt{0.056}}{(388)^4}$.