MATHEMATICS

DPP

DAILY PRACTICE PROBLEMS

DPP No. 36

Total Marks : 45

Max. Time : 54 min.

Topic : Logarithm

Type of Questions		**M.M., Min.**
Subjective Questions (no negative marking) Q.1, 2, 3, 4, 5, 6, 7, 8, 9	**(4 marks, 5 min.)**	**[36, 45]**
Single choice Objective (no negative marking) Q.10, 11, 12	**(3 marks, 3 min.)**	**[9, 9]**

1. Find logarithm of the following values :

(i) 0.128 (ii) 0.0125 (iii) 36.12 (iv) 0.0002432

(v) 5 (vi) 500 (vii) 0.01361 (viii) $[\pi] + \overline{2}.927$

(ix) $\log\left(2+\frac{1}{5}(\overline{4}.265)\right)$

2. Find antilog of the following values :

(i) $\overline{2}.362$ (ii) – 3.7913 (iii) 2.6329 (iv) 0.0125

3. (i) Find antilog of 0.4 to the base 32. (ii) Find antilog of 2 to the base $\sqrt{3}$.

(iii) Find number whose logarithm is 1.6078.

4. Find the value of $\sqrt[5]{0.00000165}$ rounded upto five places of decimal.

5. Given $\log_{10}2 = 0.3010$, find $\log_{25} 200$ by using log table

6. Find volume of a cuboid whose edges are 58.73 cm, 2.631 cm and 0.3798 cm using log table.

7. Find the value of $(23.17)^{\frac{1}{5.76}}$ using log table.

8. Find the value of $\text{antilog}_{\sqrt{3}}\sqrt{5}$ using log table.

9. Find number of digits in 875^{16}

10. Number of integers whose characteristic of logarithms to the base 10 is 3, is

(A) 8999 (B) 9000 (C) 90000 (D) 99000

11. If mantissa of lagarithm of 719.3 to the base 10 is 0.8569, then mantissa of logarithm of 71.93 is

(A) 0.8569 (B) $\overline{1}.8569$ (C) 1.8569 (D) 0.1431

12. Number of digits in integral part of $60^{12} + 60^{-12} - 60^{-15}$ is (given log 2 = 0.3030, log 3 = 0.4771)

(A) 20 (B) 21 (C) 22 (D) 24

Answers Key

1. (i) $\bar{1}.1072$ (ii) $\bar{2}.0969$ (iii) 1.5577

(iv) $\bar{4}.3859$ (v) 0.6990 (vi) 2.6990

(vii) $\bar{2}.1372$ (viii) 0.2849 (ix) .0979

2. (i) 0.02301 (ii) 0.0001617 (iii) 429.4

(iv) 1.029

3. (i) 4 (ii) 3 (iii) 40.53

4. 0.06974 **5.** 1.642 **6.** 58.68 cm^3

7. 1.726 **8.** 3.415 **9.** 48 **10.** (B)

11. (A) **12.** (C)