



ASSIGNMENT-3



Marks Obtained: _____

Student's Name: _____ Section: _____

Roll Number: _____ Date: _____

- The value of $(3^0 + 4^0 + 5^0)^0$ is
(a) 0 (b) 1 (c) 7 (d) 15
- The value of $\left\{6^{-1} + \left(\frac{3}{2}\right)^{-1}\right\}^{-1}$ is
(a) $\frac{3}{5}$ (b) $\frac{6}{5}$ (c) $\frac{5}{6}$ (d) $\frac{5}{12}$
- If $\left(\frac{4}{9}\right)^4 \times \left(\frac{4}{9}\right)^{-7} = \left(\frac{4}{9}\right)^{2x-1}$, the value of x is
(a) -1 (b) -3 (c) 5 (d) 8
- After simplifying $\frac{5^{-3} \times 6^{-5} \times 81 \times 4}{3^{-7} \times 10^{-3}}$, we get
(a) 243 (b) 524 (c) 729 (d) 1458
- $4 \times 10^2 + 1 \times 10^1 + 9 \times 10^0 + 2 \times 10^{-1} + 5 \times 10^{-2} + 8 \times 10^{-3} =$
(a) 41.258 (b) 401.258 (c) 419.258 (d) 419258
- The scientific notation for $3.25 \times 100,000$ is
(a) 325×10^3 (b) 325000 (c) 3.25×10^{-4} (d) 3.25×10^5

B. Assertion and Reason Type Questions

In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option.

- Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
- Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).
- Assertion (A) is true but Reason (R) is false.
- Assertion (A) is false but Reason (R) is true.

7. **Assertion:** The value of $100^0 + (-5)^0 + \left(\frac{1}{2}\right)^0$ is equal to 3.

Reason: The any non-zero rational number a , $a^0 = 1$.

8. **Assertion:** 2^3 is smaller than 3^2 .

Reason: If the exponent is larger, the value of the power is always larger, regardless of the base.