

Anita's Coaching Classes

Exponents and Powers

Time :45min

Marks :20

Q1 - Find the value of $(6^0 - 2^0) \times (6^0 + 2^0)$. (1 Mark)

Q2 - Express $(3^7 \times 3^3) \times 3^3$ as a rational number with negative exponent. (1 Mark)

Q3 - Find the value of $(-9)^3 \times (-4)^2$. (1 Mark)

Q4 - Express $(-4)^{-1} \times \left(\frac{1}{3}\right)^{-1}$ as a fraction. (1 Mark)

Q5 - Simplify $(2^7 \times 2^8) \div 2^{12}$ (1 Mark)

Q6 - Which one is greater 10^2 or 2^{10} ? (2 Marks)

Q7 - Write 104278 in expanded form. (2 Marks)

Q8 - Simplify $\frac{2 \times 3^4 \times 2^5}{9 \times 4^2}$. (2 Marks)

Q9 - State true or false and justify your answer:

(i) $10 \times 10^{11} = 100^{11}$

(ii) $2^3 \times 3^2 = 6^5$

(iii) $3^0 = (1000)^0$

(3 Marks)

Q10 - Show that $\left(\frac{9}{13} \times \frac{-11}{17}\right)^{-8} = \left(\frac{13}{9}\right)^8 \times \left(\frac{17}{-11}\right)^8$. (1 Mark)

Q11 - Simplify $\frac{12^4 \times 9^3 \times 4}{6^3 \times 8^2 \times 27}$. (5 Marks)