

NEPS

Class 8th Unit 3

Paper A&B

Sub: Maths

M.M: 20

Solve the following questions

Q1: Evaluate:

$$(i) \left\{ \left(\frac{1}{3} \right)^{-1} - \left(\frac{1}{4} \right)^{-1} \right\}^{-1}$$

(ii) Find the value of m for which
 $5^m \div 5^{-3} = 5^{-5}$

(2)

Q2: Express 0.000000000000942 in

(i) Standard form

(ii) Express 1.000×10^9 in usual form

(2)

Q3: A loaded truck travels 14 km in 25 minutes. If the speed remains the same, how far can it travel in 5 hours. (2)

Q4: A school has 8 periods a day each of 45 mins duration. How long would each period be if the school has 9 periods a day, assuming the no. of school hours to be the same. (2)

Q5: If a box of sweets is divided among 24 children, they will get 5 sweets each. How many would each get, if the no. of children is reduced by 4? (2)

Q6: In a stack there are 5 books each of thickness 20 mm & 5 paper sheets each of thickness 0.016 mm. What is the total thickness of the stack. (2)

Q7: Multiply:

(i) $\left[\frac{3}{4}a^2 + 3b^2 \right]$ and $4\left[a^2 - \frac{2}{3}b^2 \right]$

(ii) Simplify:

$$(a+b)(c-d) + (a-b)(c+d) + 2(ac+bd)$$

(2)

Q8: Add:

$$l^2 + m^2, m^2 + n^2, n^2 + l^2, 2lm + 2mn + 2nl$$

(i) Subtract

$$4a - 7ab + 3b + 12 \text{ from } 12a - 9ab + 5b - 3$$

(2)

Q9: Fill in the blanks:

(i) $a^m \div a^n = \underline{\hspace{2cm}}$

(ii) $(-4)^{-2} = \underline{\hspace{2cm}}$

(iii) $(a+b)(a-b) = \underline{\hspace{2cm}}$

(iv) $(3^{-1} + 4^{-1} + 5^{-1})^0 = \underline{\hspace{2cm}}$

(4)