NORTH POINT SR. SEC. BOARDING SCHOOL

SUB: MATHS TESTCODE- T009

VIII Syllabus: Chap-1,2,5,6 02/07/2020 FM-20

I. Solve the following problems.

1. What should be subtracted from $-\frac{11}{15}$ to get $\frac{-1}{7}$?
Ans- $\frac{-62}{105}$

2. Divide the sum of $\frac{8}{3}$ and $\frac{3}{7}$ by their difference.
Ans: $\frac{65}{47}$

3. Find four rational numbers between $\frac{-3}{2}$ & $\frac{-1}{3}$.
Ans: $\frac{-8}{6}, \frac{-7}{6}, \frac{-5}{6}, \frac{-4}{6}$

4. Find the value of m : $(-5)^{m-1} \div (-5)^2 = (-5)^{-6}$
Ans: M = -3

5. Express in standard form: 0.000365×10^6.
Ans: 3.65×10^2

6. Simplify: $a^2(a^2+1) - a^3(a+1) - a(a^3-a)$.
Ans: $2a^2 - a^3 - a^4$

7. From the product of $(2l+3m)$ and $(3l+m)$ subtract the product of $(l+3m)$ and $(4l-3m)$.
Ans: $2l^2 + 2ml + 12m^2$

8. If $p - \frac{1}{p} = 2$, find the value of $p^2 + \frac{1}{p^2}$ & $p^4 + \frac{1}{p^4}$
Ans $p^2 + \frac{1}{p^2} = 6$ $p^4 + \frac{1}{p^4} = 34$

9. Divide: $(x^3 - 6x^2 + 11x - 6)$ by $(x^2 - 5x + 6)$
Ans: $x - 1$

10. Divide using factorization method
$(x-1)^2 - (x-2)^2$ by $2x-3$ Ans = 1