D.A.V. PUBLIC SCHOOL, CRRC, Medical Road, Gaya
Sunday Test (Date –01-09-2024)

Class –XI **Time: 40 Min**
Sub. – Maths **F.M.- 20**

Section – A (2 x 5 = 10)

1) Find the value of Cosec (-1410°).
2) Show that Sin105° + Cos105° = $\frac{1}{\sqrt{2}}$.
3) Prove that: $\frac{\text{Sin}\,(x+y)}{Sin(x-y)} = \frac{tanx+tany}{tanx-tany}$.
4) Prove that: $\frac{Sin3x-Sin}{Cos2x}$ = 2 Sinx.
5) If tanx = $\frac{1}{7}$ and tany = $\frac{1}{3}$ show that Cos2x = Sin4y.

Section – B (2 x 5 = 10)

6) Prove that:
   Cos6x = 32 $\cos^6 x$ – 48 $\cos^4 x$ + 18 $\cos^2 x$ -1.
7) Prove that:
   Cosx Cos2x Cos4x Cos8x = $\frac{Sin16x}{16\ Snx}$.

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