



JAYAM TUITION CENTRE.

VETTAVALAM. TIRUVANNAMALAI-DT.

STD: 12
SUB: MATHS
MARKS: 25

EXERCISE TEST - 11 (EX:4-3,4)

2 Mark Questions

5 X 2 = 10

1. Find the principal value of $\tan^{-1}(\sqrt{3})$.
2. Find $\tan(\tan^{-1}(2019))$.
3. Prove that $\tan(\sin^{-1} x) = \frac{x}{\sqrt{1-x^2}}$, $-1 < x < 1$.
4. If $\cot^{-1}\left(\frac{1}{7}\right) = \theta$, find the value of $\cos \theta$.
5. Show that $\cot^{-1}\left(\frac{1}{\sqrt{x^2-1}}\right) = \sec^{-1} x$, $|x| > 1$.

5 Mark Questions

3 X 5 = 15

6. Find the value of $\cot^{-1}(1) + \sin^{-1}\left(-\frac{\sqrt{3}}{2}\right) - \sec^{-1}(-\sqrt{2})$.
7. Find the value of $\sin^{-1}(-1) + \cos^{-1}\left(\frac{1}{2}\right) + \cot^{-1}(2)$.
8. Find the value of $\cos\left(\sin^{-1}\left(\frac{4}{5}\right) - \tan^{-1}\left(\frac{3}{4}\right)\right)$.