



JAYAM TUITION CENTRE.

VETTAVALAM, TIRUVANNAMALAI-DT.

STD: 12
SUB: MATHS
MARKS: 25

EXERCISE TEST - 10 (EX:4-1,2)

2 Mark Questions

5 X 2 = 10

- Find the domain of $\cos^{-1} \left(\frac{2+\sin x}{3} \right)$.
- Find the value of $\sin^{-1} \left(\sin \frac{5\pi}{9} \cos \frac{\pi}{9} + \cos \frac{5\pi}{9} \sin \frac{\pi}{9} \right)$.
- For what values of x , the inequality $\frac{\pi}{2} < \cos^{-1}(3x - 1) < \pi$ holds?
- Is $\cos^{-1}(-x) = \pi - \cos^{-1}(x)$ true? Justify your answer.
- For what value of x does $\sin x = \sin^{-1} x$?

5 Mark Questions

3 X 5 = 15

- Find the value of $\cos^{-1} \left(\cos \left(\frac{4\pi}{3} \right) \right) + \cos^{-1} \left(\cos \left(\frac{5\pi}{4} \right) \right)$.
- Find the value of $\cos \left(\cos^{-1} \left(\frac{4}{5} \right) + \sin^{-1} \left(\frac{4}{5} \right) \right)$
- Find the domain of $f(x) = \sin^{-1} \left(\frac{|x|-2}{3} \right) + \cos^{-1} \left(\frac{1-|x|}{4} \right)$