Q.No.	DAY - 23
129	**EXERCISE 4.2** 1. Find all values of x such that (i) $-6\pi \le x \le 6\pi$ and $\cos x = 0$ (ii) $-5\pi \le x \le 5\pi$ and $\cos x = 1$.
130	2. State the reason for $\cos^{-1}\left[\cos\left(-\frac{\pi}{6}\right)\right] \neq -\frac{\pi}{6}$.
131	3. Is $\cos^{-1}(-x) = \pi - \cos^{-1}(x)$ true? Justify your answer.
132	5. Find the value of (iii) $\cos^{-1}\left(\cos\frac{\pi}{7}\cos\frac{\pi}{17} - \sin\frac{\pi}{7}\sin\frac{\pi}{17}\right)$
133	6. Find the domain of (i) $f(x) = \sin^{-1}\left(\frac{\lvert x\rvert - 2}{3}\right) + \cos^{-1}\left(\frac{1-\lvert x\rvert}{4}\right)$ (ii) $g(x) = \sin^{-1} x + \cos^{-1} x$
134	7. For what value of x, the inequality $\frac{\pi}{2} < \cos^{-1}(3x-1) < \pi$ holds?

8. Find the value of

(i) $\cos\left(\cos^{-1}\left(\frac{4}{5}\right)+\sin^{-1}\left(\frac{4}{5}\right)\right)$

(ii) $\cos^{-1}\left(\cos\left(\frac{4\pi}{3}\right)\right)+\cos^{-1}\left(\cos\left(\frac{5\pi}{4}\right)\right)$.