Comprehensive Test Series-04

CHAPTER-2(Inverse – Trigonometric Functions)

TIME: 15 min   **MM: 10**

General Instructions:
- ➢ All Questions are compulsory.
- ➢ Marks are given alongwith the questions individually.
- ➢ Use of calculator is not permitted.

Q.1 Find the principal value of following:

(i) $\cot^{-1}\left(\dfrac{-1}{\sqrt{3}}\right)$

(ii) $\cos^{-1}\left(\dfrac{\sqrt{3}}{2}\right)$

(iii) $\tan^{-1}\left(-\sqrt{3}\right)$

(iv) $\operatorname{cosec}^{-1}\left(-\sqrt{2}\right)$

(v) $\sec^{-1}\left(\dfrac{2}{\sqrt{3}}\right)$

Q.2 Find the value of following

(i) $\tan^{-1}(1) + \cos^{-1}\left(\dfrac{-1}{2}\right) + \sin^{-1}\left(\dfrac{-1}{2}\right)$

(ii) $\tan^{-1}\left(\sqrt{3}\right) - \sec^{-1}(-2)$