

## 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.
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Q.1 Find the principal value of following:

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

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

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

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

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

Q.2 Find the value of following

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

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