**CLASS : XII**

**SUBJECT : mathematics CHAPTER: 2 inverse trigonometry**

**DATE OF GIVING: DATE OF SUBMISSION:**

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| **Sr. No.** | **Knowledge Based** | **Marks** | **Date** |
| K-1 | http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_09_clip_image024.gif = 2 | 4 |  |
| K2  | Find the principal value of + | 1 |  |
| K-3 | Prove that + + =  | 4 |  |
| K-4 | 1. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image044.gif
2. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image046.gif
3. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image048.gif
 | 4 |  |
| K-5 | **Prove: sin-1 1/ +cot-1 3 =π/4** | 1 |  |
| K-6 | **tan-1 +tan-1 =2π/3 solve for x** | 4 |  |
| **S. No.** | **Understanding Based** |  |  |
| U-1 | http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_09_clip_image026.gif | 1 |  |
| U-2 | http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_09_clip_image032.gif | 1 |  |
| U-3 | **.**    Find the Value of1. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_09_clip_image034.gif
2. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_09_clip_image036.gif
 | 4 |  |
| U-4 | http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image054.gif | 4 |  |
| U-5 | **If cos-1 a+ cos-1 b+ cos-1 c=π ,prove that a2 + b2 + c2+ 2abc=1** | 4 |  |
| U6  | **Find the value of x** **+ =** | 4 |  |
| **S. No.** | **Application** |  |  |
| A-1 | Show that = + ½  | 4 |  |
| A-2 | http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image056.gif | 4 |  |
| A-3  | **Solve for x : cot-1 x – cot-1 (x+2) = π/3** | 4 |  |
| A-4  | **Find three branches , other than the principal value branch of**  | 1 |  |
| **S.No.** | **HOTS** |  |  |
| H-1 | **Prove that**  + **+ =0** | 4 |  |
| H-2 | Show that1. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image030.gif
2. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image032.gif
3. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image036.gif
4. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image038.gif
5. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image040.gif
6. http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image042.gif
 | 4 each part |  |
| H-3  | http://www.cbseguess.com/papers/cbse_important_questions/xii/2009/images/maths_10_clip_image052.gif | 6 |  |
| H4  | Prove that + + = | 6 |  |
| H 5  | If + =prove that x+y+xy =1 | 6 |  |
| H6 | If -2xy/ab cos += sin2  | 6 |  |