Doon Public School

Sector-21, Panchkula

Assignment – 3   **Subject: Mathematics**   **Class: X**

Date: 16 -10 -2018

Answer the following questions

1. Find the value of $3\sin x - 4\cos^3 x,\, if\, \sin x = \dfrac{1}{2}$.

2. If $\sec \theta = 2\, then$

   Evaluate $\dfrac{4\cos \theta - \sqrt{3}\sin \theta}{\tan \theta - \cot \theta}$

3. If $\sin \theta = \sqrt{3}\cos \theta$,   Find the value of $\dfrac{\tan \theta - 1}{\tan \theta + 1}$

4. Find the value of $4\cosec^2 60^0\text{-}16\tan^2 30^0$

5. Find the value of $\sin 30^\circ \cos 60^\circ - \tan 45^\circ \sec 30^\circ \cos ec60^\circ + 2cot45^\circ$