

Professor Vishwanathan Iyer's

HERAMB COACHING CLASSES

Yogeshwar Towers, Katemanivali, Kalyan (East)

Date: 22/07/17

XII/Mathematics

Marks: 30

Duration:1 Hour

Find $\frac{dy}{dx}$ for the following.(Any 6)

1) $y = \sin^{-1} \left(\frac{1-x^2}{1+x^2} \right)$

5) $y = \frac{(2x-3)^{1/4}}{(3x+1)^{1/3} (2-x)^{7/2}}$

2) $y = \tan^{-1} \left(\frac{6x}{1-5x^2} \right)$

6) $y = 5^x \cdot e^{\cos x} \cdot \tan^{-1} x$

3) $y = x^x + (7x - 1)^x$

7) $y = 5^x + x^x$

4) $y = x^{\tan^{-1} x}$

8) $y = (\sin x)^x + x \cdot \sin x$

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