1.
(A)$\frac{4}{\pi}$xtan^{-}1x+$\frac{2}{\pi}$ ln$(1+\mathrm{x}^2)-$x+c 4 TT TT)$\frac{4}{\pi}$xtan^{-}1x+$\frac{2}{\pi}$ ln$(1+\mathrm{x}^2)$+x+c 4 (**C**) T π
(B) $\frac{4}{\pi}$xtan^{-1}x- $\frac{2}{\pi}$ln(1+ x^2) + x+ c TT π 4 $-\frac{2}{\pi}$ ln$(1+\mathrm{x}^2)-$x+c (D)$\frac{4}{-}$xtan^{-}1x- π TT
2.
(logx) dx= x^2 (A)$\frac{1}{2}$(logx+1)+c (C)$\frac{1}{=}$(logx-1)+c
(B) $-\frac{1}{\mathrm{v}}$(logx+1)+c (D) log(x+1)+c
3.
$\int \left(\mathrm{xe}^{\ell \mathrm{nsinx}} - \mathrm{cosx}\right)\mathrm{dx}$ is equal to: (A)xcosx+c (C) $-$ e$^{\mathrm{lnx}}$cosx+
(B) sinx- xcosx+ c (D) sinx+ xcosx+ c
4.
If $\int$ xtan^{-1}x dx= $\sqrt{1+\mathrm{x}^2}$f(x) + Aln(x+ v) $\overline{\sqrt{1+\mathrm{x}^2}}$ (A) f(x) = tan^{-1}x, A= - 1
$\mathbf{x}^2+1)+\mathbf{C}$,then (B) f(x) = ta$n^{-1}$x, A= 1