Math 222-Timed exercise -3 (53402)

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_ Marks: 

Question: Choose the correct answer

1) The value of $\frac{dy}{dx}$ where y is given by: $\left(e^{x}+e^{-2x}\right)\left(3x^{2}-2x\right) $at $x=0$ is equal to

(a) $-4$ (b) $4 $ (c) $-2$ (d) None of the previous

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2) The value of $\frac{dy}{dz}$ where y is given by: $\frac{3cosz}{sin2z} $at $z=\frac{π}{4}$ is equal to

 (a) $\frac{3}{\sqrt{2}}$ (b) $-\frac{3}{\sqrt{2}}$ (c) $-\frac{\sqrt{2}}{3}$ (d) None of the previous

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3) The value of $ \frac{dy}{dx}$ where y is given by: $ylnx-2y^{2}=0$ at $x=1$ is equal to

 (a) $-\frac{1}{4}$ (b) $4$ (c) $\frac{1}{4}$ (d) None of the previous

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4) The second derivative $\frac{dy}{dx}$ where y is given by: $ln\left(x^{2}+2x+1\right)$ is equal to

 (a) $\frac{1}{x+1}$ (b) $\frac{2}{x+1}$ (c) $\frac{2}{x^{2}+2x+1}$ (d) None of the previous

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5) The second derivative $ \frac{d^{2}y}{dx^{2}}$ where y is given by: $\sqrt{sec^{2}x-1} $ is equal to

(a) $2sec^{2}xtanx$ (b) $secxtanx$ (c) $sec^{2}xtanx$ (d) None of the previous

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