## BACHELOR OF ENGINEERING ASSIGNMENT III

## ENG 281: Engineering Mathematics I

Instruction: Answer all the questions.

## Question 1 [10 Marks]

Find the area bounded by the curves $y=3 e^{2 x}$ and $y=3 e^{-x}$ and the ordinates at $x=1$ and $x=2$.

## Question 2 [10 Marks]

The parametric equations of a curve are $y=2 \sin \frac{\pi}{10} t$ and $x=2+2 t-2 \cos \frac{\pi}{10} t$. Find the area under the curve between $t=0$ and $t=10$.

