

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201 Semester-101 QUIZ I

NAME:

S.No.

ID:

Maximum Marks: 15

Section:10

Time Allowed: 25 minutes

(1) Find the length of the polar curve $x = e^t + e^{-t}$; $y = 5 - 2t$; $0 \leq t \leq 3$.

(2) Find the slope of tangent line to the curve $r = 1 + \cos\theta$ at $\theta = \frac{\pi}{6}$.

(3) sketch the graph of the parametric equations $x = 4\sin t$, $y = -5\sin t$, $-\pi \leq t \leq \frac{\pi}{2}$ and mark the direction.