

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201 Semester-112 QUIZ I

NAME:

S.No.

ID:

Maximum Marks: 10

Section:04

Time Allowed: 30 minutes

- (1) Find the length of the curve $x = e^t + e^{-t}$; $y = 5 - 2t$; $0 \leq t \leq 3$.
- (2) Sketch the graph of the parametric equations $x = t + 2$, $y = -t^3 + 2t$ and mark the direction in which the curve is defined for $-2 \leq t \leq 2$. Also, eliminate the parameter t to find corresponding cartesian equation.
- (3) Find the equation(s) of the tangent(s) to the curve $x = t^2$, $y = t^3 - 3t$ that pass through the point $(3, 0)$.