King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201   Semester-152   QUIZ I

NAME: S.No.   ID:

Maximum Marks: 10   Section:13   Time Allowed: 35 minutes
(1) Sketch the graph of the parametric equations $y = t + 2, x = t^3 - 2t$ and mark
the direction in which the curve is defined for $-2 \leq t \leq 2$.
(2) Find the length of the curve $x = 4e^{\frac{t}{2}}$, $y = -t + e^t, -8 \leq t \leq 3$.
(3) On the same polar coordinate system, draw the unit circle centered at origin
and plot the points whose polar coordinates are $(2, \frac{3\pi}{4}), (-\frac{3}{2}, \frac{\pi}{2})$, and $(-\frac{1}{2}, -\frac{7\pi}{6})$.