

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:06

Time Allowed: 25 minutes

- (1) Find the length of the curve $x = e^t - t, y = 4e^{\frac{t}{2}}, -8 \leq t \leq 3$.
- (2) Sketch the graph of the parametric equations $x = t + 2, y = t^3 - 2t, -2 \leq t \leq 2$ and mark the direction.
- (3) Find the slope of tangent line to the curve $r = 1 + \cos\theta$ at $\theta = \frac{\pi}{6}$.