King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201   Semester-143   QUIZ II

NAME: S.No.   ID:

Maximum Marks: 10   Section: Time Allowed: 40 minutes

(1) Graph the curve $r = \cos \frac{\theta}{3}$.

(2) Find the area of the region that lies inside the circle $x^2 + y^2 = 1$ and outside the curve $r = 1 - \cos \theta$, where $0 \leq \theta \leq \frac{\pi}{2}$.

(3) Find the slope of the curve $r = 5 - 4 \sin \theta$ at $\theta = \pi$.