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

S.No.

## NAME:

## ID:

Maximum Marks: 10 Section: Time Allowed: 40 minutes

(1) Graph the curve  $r = \sin 3\theta$ .

(2) Find the area inside the curve  $r = 1 + \sin \theta$  and outside the curve  $r = \sin \theta$ , where  $\frac{\pi}{3} \le \theta \le \frac{\pi}{2}$ . (3) Find the slope of the curve  $r = 5 - 4\sin\theta$  at  $\theta = \pi$ .