King Fahd University of Petroleum and Minerals Department of Mathematics and Statistics Math-201 Semester-152 QUIZ 02

NAME:

ID:

Maximum Marks: 10 Section:13 Time Allowed: 35 minutes

S.No.

- (1) Sketch the polar curve $r = |\sin(2\theta)|, \quad 0 \le \theta \le \pi$.
- (2) Determine the polar coordinates of the intersecting point(s) of the curves $r = \sqrt{3} \cos \theta$ and $r = 1 + \sin \theta$.
- (3) Find the area of the region inside the circle $r = 2 \sin \theta$ and above the line $r = \frac{3}{2} \csc \theta$.