

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201 Semester-091 QUIZ II

NAME:

S.No.

ID:

Maximum Marks: 10

Section:06

Time Allowed: 15 minutes

- (1) Sketch the curve for polar equation $r = 1 - 3\sin\theta$.
- (2) Find the area of the region that lies inside the cardioid $r = 1 - \sin\theta$ and outside the circle $r = 1$
- (3) Find the scalar projection of $\mathbf{b} = \langle 1, 1, 2 \rangle$ onto $\mathbf{a} = \langle -2, 3, 1 \rangle$.