

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201 Semester-092 QUIZ II

NAME:

S.No.

ID:

Maximum Marks: 15

Section:01

Time Allowed: 25 minutes

(1) Find the exact length of the polar curve $r = e^{2\theta}$, $0 \leq \theta \leq 2\pi$.

(2) Find the area of the region that lies inside the curve $r = 2 + \sin\theta$ and outside the curve $r = 3\sin\theta$.

(3) Find the vector projection of $\langle 1, 1, 2 \rangle$ onto $\langle -2, 3, 1 \rangle$.