

King Fahd University of Petroleum and Minerals Department of Mathematics and
Statistics

Math-201 Semester-163 QUIZ IV

NAME:

S.No.

ID:

Maximum Marks: 10

Section:06

Time Allowed: 30 minutes

(1) Find and sketch the domain of $f(x, y) = \sqrt{(x^2 - 4)(y^2 - 9)}$

(2) Find the limit, if it exists $\lim_{(x,y) \rightarrow (1,2)} \frac{2y^2 - x^2y - 4xy + 2x^3}{y - 2x}$.

(3) If $w = y \sin(y^2x)$, find $\frac{\partial^2 w}{\partial y \partial x}$.