

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201 Semester-161 QUIZ IV

NAME:

Serial No.

ID:

Maximum Marks: 8

Section:01

Time Allowed: 30 minutes

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

(2) Use implicit differentiation to find $\frac{\partial z}{\partial y}$ if

$$yz = \ln(x + z).$$