

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201 Semester-101 QUIZ IV

NAME:

S.No.

ID:

Maximum Marks: 10

Section:08

Time Allowed: 20 minutes

(a) Find an equation of the plane that contains the line $x = 3 + 2t, y = t, z = 8 - t$ and is parallel to the plane $2x + 4y + 8z = 17$.

(b) Let $f(x, y) = \ln(9 - x^2 - 9y^2)$.

(i) Find and sketch the domain.

(ii) Find the range of f .

(c) Identify and sketch the surface $x^2 + 2z^2 - 6x - y + 10 = 0$.