KFUPM | Term 181 | Date: 25/10/2018

Mathematics & Statistics | MATH 201 | Duration:20 minutes

Quiz# 3

Name: | ID #: | Section:

Q1. Find an equation for the plane containing the point S (2,0,1) and the line L

$$L: x = 1 + 2t, y = 2 + 3t, z = 3 + 4t, t \in (-\infty, \infty)$$

Q2: Identify and sketch the surface given by the equation

$$x^2 - 2x + 2y^2 - z^2 = 0$$

Q3: Find the limit or show it does not exist. $\lim_{(x,y)\to(0,1)} \frac{x^3+(y-1)^3}{x^3-(y-1)^2}$

Q4: Let $f(x,y) = \frac{\sqrt{x-y^2}}{\ln(4-x^2-y^2)}$. Find and sketch the domain of f(x,y).