KFUPM--Term 132(2014)

Math 201 Quiz # 2-a Time: 20 minutes Date: 18-3-14

Name	ID #	Sr #	Sec#	Marks:- /8

Q 1. Find parametric equations for the line through $(1,2,-1)$ perpendicular to the vectors $\boldsymbol{u} = \boldsymbol{i} + 2\boldsymbol{j} + 3\boldsymbol{k}$ and $\boldsymbol{v} = 3\boldsymbol{i} + 4\boldsymbol{j} + 5\boldsymbol{k}$.

Q2. Identify and draw a rough sketch of the surface: $4x^2 + 4y^2 + z^2 - 8y - 4z + 4 = 0$.

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Math 201 Quiz # 2-b Time: 20 minutes Date: 18-3-14

Name	ID #	Sr #	Sec#	Marks:- /8

Q 1. Check whether the lines $L1: x = 3 + 2t, y = -1 + 4t, z = 2 - t, \quad -\infty < t < \infty,$
$L2: x = 3 + 2w, y = 2 + w, z = -2 + 2w, -\infty < w < \infty$
are skew or not.

Q2. Find an equation for the level curve of $f(x, y) = ln(x^2 + y)$ through $(-1,1)$ and sketch it.

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Math 201 Quiz # 2-c Time: 20 minutes Date: 18-3-14

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Q 1. Find distance between L: $x = 1 - t,\ y = 2 + t, z = 3 - t$ and $P: 3x + y - 2z = 6$.

Q2. Determine the domain of the function $f(x, y) = ln(9 - 9x^2 - y^2)$ and sketch it.