KFUPM--Term 151

Math 201 Quiz # 3(a) Time: 20 minutes Date: 10-11-15

Name	ID	Sr	Sec	Marks:- /8

Q 1. Evaluate $\lim_{(x,y)\to(2,1)} \frac{x^2-2xy}{x^2-4y^2}$, if it exists.

Q2. Find $f_x \ and \ f_y$ as functions if $f(x,y) = \frac{y}{y+\cos x}$.

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Math 201 Quiz # 3(b) Time: 20 minutes Date: 10-11-15

Name	ID	Sr	Sec.	Marks:- /8

Q 1. Show that $\lim_{(x,y)\to(0,0)} \frac{xy}{x^2+y^2}$ does not exist.

Q2. Find $\frac{\partial z}{\partial x}$ and $\frac{\partial z}{\partial y}$ at $(1, ln2, ln3)$ if $xe^y + ye^z + 2lnx - 2 - 3ln2 = 0$.

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Math 201 Quiz # 3(c) Time: 20 minutes Date: 10-11-15

Name	ID	Sr	Sec	Marks:- /8

Q 1. Show that $\lim_{(x,y)\to(1,-1)} \frac{xy+1}{(x-y)(x+y)}$ does not exist.

Q2. Assume that $z = f\left(p\,q^2, \frac{q}{p}\right)$, $\frac{\partial f(x,y)}{\partial x} = xy$, $\frac{\partial f(x,y)}{\partial y} = \frac{x^2}{2}$. Find $\frac{\partial z}{\partial p}$ and $\frac{\partial z}{\partial q}$.

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Math 201 Quiz # 3(d) Time: 20 minutes Date: 10-11-15

Name	ID	Sr	Sec	Marks:- $/_8$

Q 1. Find $\lim_{(x,y)\to(0,0)}(x^2+y^2)\ ln\ (x^2+y^2)$

Q2. If $f(x,y)=\sin\left(\frac{xy}{y+1}\right)$, calculate $\frac{\partial f}{\partial x}$ and $\frac{\partial f}{\partial y}$.