KFUPM--Term 181

Math 201 Quiz # 4(a) Time: 20 minutes Date: 22-11-2018

Name	ID #	Sr #	Sec. 09	Marks(15):-

Q 1. Find all the local maxima, local minima and saddle points of $f(x,y) = e^x(x^2 - y^2)$.

Q2. Find the extreme values of $f(x,y) = xy$ on the ellipse $x^2 + 2y^2 = 1$.

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Math 201 Quiz # 4(b) Time: 20 minutes Date: 22-11-2018

Name	ID #	Sr #	Sec. 09	Marks(15):-

Q 1. Find all the local maxima, local minima and saddle points of $f(x,y) = \ln(x+y) + x^2 - y$.

Q2. Find the extreme values of $f(x,y) = xy$ on the circle $x^2 + y^2 = 10$.

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Math 201 Quiz # 4(c) Time: 20 minutes Date: 22-11-2018

Name	ID #	Sr #	Sec. 13	Marks(15):-

Q 1. Find all the local maxima, local minima and saddle points of $f(x,y) = 2\ln x + \ln y - 4x - y$.

Q2. Find the extreme values of $f(x,y) = x^2 y$ on the line $x + y = 3$.

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Math 201 Quiz # 4(d) Time: 20 minutes Date: 22-11-2018

Name	ID #	Sr #	Sec. 13	Marks(15):-

Q 1. Find all the local maxima, local minima and saddle points of $f(x,y) = e^{x^2+y^2-4x}$.

Q2. Find the maximum value of $f(x,y) = 49 - x^2 - y^2$ on the line $x + 3y = 10$.