KFUPM--T171

Math 201 Quiz 4(a) Time: 20 minutes Date: 12- 12- 2017

Name	ID	Sr#	Sec.#	Marks:- /6

Q 1. Find the saddle points of $f(x,y) = x^3y + 12x^2 - 8y$.

Q2. Evaluate $\int_0^4 \int_1^4 \left(\frac{x}{2} + \sqrt{y}\right) dy\, dx$.

KFUPM--T171

Math 201 Quiz 4(b) Time: 20 minutes Date: 12- 12- 2017

Name	ID	Sr#	Sec.#	Marks:- $/_6$

Q 1. Find all the critical points of $f(x,y) = 2x^2 + y^2 - 4(x+y) + 1$ on the boundary of triangular plate bounded by the lines: $x = 0, y = 2, y = 2x$.

Q2. Evaluate $\int_0^1 \int_{-3}^3 \frac{xy^2}{x^2+1}\, dy\, dx$.

KFUPM--T171

Math 201 Quiz 4(c) Time: 20 minutes Date: 12- 12- 2017

Name	ID	Sr#	Sec.#	Marks:- $/_6$

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

Q2. Evaluate $\int_{-3}^{3}\int_{0}^{\frac{\pi}{2}}(y + y^2\cos x)dx\,dy$.

KFUPM--T171

Math 201 Quiz 4(d) Time: 20 minutes Date: 12- 12- 2017

Name	ID	Sr#	Sec.#	Marks:- $/_6$

Q 1. Find all the critical points of $f(x, y) = x^2 + y^2 - xy + 1$ on the boundary of the region in the first quadrant bounded by the lines: $x = 0, y = 4, y = x$.

Q2. Evaluate $\int_0^1 \int_1^2 \frac{xe^x}{y}\, dy\, dx$.