KFUPM--Term 162

Math 201 Quiz 4(a) Time: 20 minutes Date: 4- 5- 17

Name	ID	Sr	Sec.7	Marks:- $/_7$

Q 1. Find the local extreme values and saddle points of $f(x,y) = x^3 + 3xy + y^3$.

Q2. Evaluate $\int_0^1 \int_0^1 \frac{y}{xy+1}\, dy\, dx$.

KFUPM--Term 162

Math 201 Quiz 4(b) Time: 20 minutes Date: 4- 5- 17

Name	ID	Sr	Sec.7	Marks:- $/_7$

Q 1. Find the absolute maxima and minima of $f(x,y) = 2x^2 + y^2 - 4(x+y) + 1$ on the closed triangular plate bounded by the lines: $x = 0, y = 2, y = 2x$.

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

KFUPM--Term 162

Math 201 Quiz 4(c) Time: 20 minutes Date: 4- 5- 17

Name	ID	Sr	Sec. 13	Marks: $/_7$

Q 1. Find the local extreme values and saddle points of $f(x, y) = 4xy - x^4 - y^4$.

Q2. Evaluate $\int_{-1}^{1} \int_{0}^{\pi} xy \cos y \, dy \, dx$.

KFUPM--Term 162

Math 201 Quiz 4(d) Time: 20 minutes Date: 4- 5- 17

Name	ID	Sr	Sec.13	Marks:- $/_7$

Q 1. Find the absolute maxima and minima of $f(x,y) = x^2 + y^2 - xy + 1$ on the closed triangular plate in the first quadrant bounded by the lines: $x = 0, y = 4, y = x$.

Q2. Evaluate $\int_1^2 \int_0^1 xye^x \, dx \, dy$.