KFUPM Term (142) Name_____Serial#_____

MATH 201 Quiz # 5(a) ID#_____ Section 9

Time: 20 Minutes Marks : /8

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1) Evaluate $\int_0^1 \int_0^{\sqrt{1-x^2}} \frac{1}{x^2+y^2+1}\, dy\, dx$.

2) Use triple integral to find volume of the solid bounded by cylinders $x^2 + y^2 = 1$ and $x^2 + z^2 = 1$.

KFUPM Term (142) Name_____Serial#_____

MATH 201 Quiz # 5(b) ID#_____ Section 9

Time: 20 Minutes Marks: /8

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1) Convert $\int_1^2 \int_0^y \frac{1}{\sqrt{x^2+y^2}}\, dx\, dy$ in polar coordinates.

2) Evaluate $\int\int\int xydv$ where s is bounded by parabolic cylinders $x = y^2$ and $y = x^2$ and plane $z = 0$ and $z = x + y$.