KFUPM Term (111) Name______ Serial # ______

MATH 201 Quz# 4(a) ID# ______ Section # 22 Marks: /9

Time: 20 Minutes

1. Evaluate $\iint_{R} \cos(x+2y) dA$ where $R = \{(x,y) | 0 \le x \le \pi \text{ and } 0 \le y \le \pi/2 \}$

2. Set up a double integral to find volume of the solid bounded by the cylinder $x^2 + y^2 = 4$ and the planes y + z = 4 and z = 0.

1. Evaluate $\int_0^2 \int_{y/2}^1 \cos(x^2) dx dy$

2. Set up a double integral to find volume of the solid that lies in the first octant and is bounded by three coordinate planes and the cylinders $x^2 + y^2 = 4$ and $y^2 + z^2 = 4$