# MATH 102-14 (SPRING 2024) QUIZ 4 

Full name: $\qquad$ Student number: $\qquad$ Total:__ / 10 pts.
(1) Find a linear approximation to $f(x, y)=e^{x} \cos (x y)$ at the point $(0,0)$ and use it to approximate $(0.1,-0.2)$.
(2) For the function in part (1), are there any points at which the tangent plane of $f$ is parallel to the $x-y$ plane? If so, find them.

## Solution.

