(Q4)
Given the curve $\sin(2x-y)+x^3y^2+1=e^{y-x^2}$, we are required to find the equation of the tangent line at $(0,0)$.
We can find the derivative by means of implicit differentiation:

$$\frac{d}{dx}\sin(2x-y)+x^3y^2+1-e^{y-x^2}$$
$$=(\cos(2x-y)\cdot 2-y')+(3x^2y^2+x^3(2y\cdot y'))-(e^{y-x^2}\cdot(y'-2x))$$

Considering the curve at (0, 0):

$$(\cos(0)\cdot 2-y')+(3(0)^2(0)^2+0^3(0\cdot y'))-(e^{0-0^2}\cdot(y'-0))$$
$$=2-y'-y'=0 \implies y'=1$$

Therefore, the slope of the tangent is 1. Substituting the point (0,0) and slope into the form $y=mx+b$:

$$0=1(0)+b \implies b=0$$
$$\implies y=x$$

Which is the equation of the tangent line.