Assignment No. 1 MTH301 (Fall 2024)

Total Marks: 20
Due Date: 12th November 2024

Section In Charge: Mubashar Hussain

Q No.1

Find the partial derivative of $z = x^2 y cos(x - y)$ with respect to x and y.

Q No.2

Express the point $\left(4,\ 4\sqrt{3}, 0\right)$ in polar coordinates.

Q No.3

Verify Euler's theorem for the function $f(x, y) = x^3 + 2xy^2$ and find its degree of homogeneity.