King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math-201   Semester-131   QUIZ I

NAME: S.No.   ID:

Maximum Marks: 10   Section:15   Time Allowed: 30 minutes

(1) Where does the line through $(2, 0, 1)$ and $(4, -1, 2)$ intersects the plane $x - 3y + z = 6$?

(2) Identify and sketch the surface given by
$$-4x^2 + 8x + y^2 + 2y - \frac{4z^2}{9} = 7.$$

(3) Find and sketch the domain of the function $f(x, y) = \sqrt{x^2 + y^2 - 1} \ \ln(4 - x^2 - y^2)$.

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