

SS

(An Autonomous Institution)

DEPARTMENT OF MATHEMATICS

UNIT-II

VECTOR CALCULUS

Scalar Yuantity

A Scalar Quantity is that which has magnitude and is not related to any direction. Vector Quantity:

A vector vuantity is that which has both magnitude and direction.

Scalar point function: many to playouniteur el jour

If corresponding to each point P of a siegion R there corresponds a scalar denoted by $\varphi(P)$ or $\varphi(x,y,z)$ then φ is said to be a scalar point function for the siegion R.

Example: The temperature $\varphi(P)$ at any point P of a body occupying a certain Jugion is a scalar point function.

Vector point function:

If corresponding to each point P of a Inequality of these corresponds a vector denoted by F(P), then F is said to be a vector point function for the Region R.

Example: The acceleration F(P) of a particle at any time to occupying the position P in a certain stegion is a vector point function.

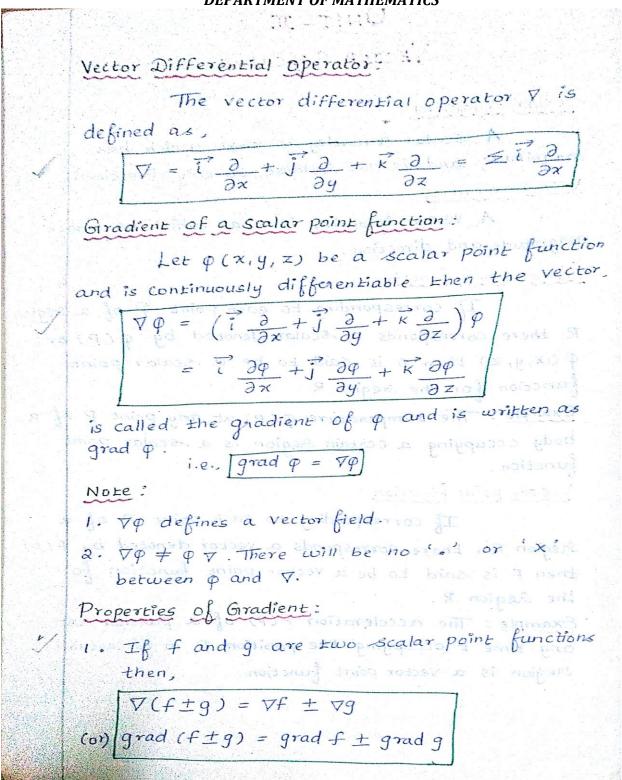
E pine T. J. pine = (6 +3) port (10)





(An Autonomous Institution)

DEPARTMENT OF MATHEMATICS



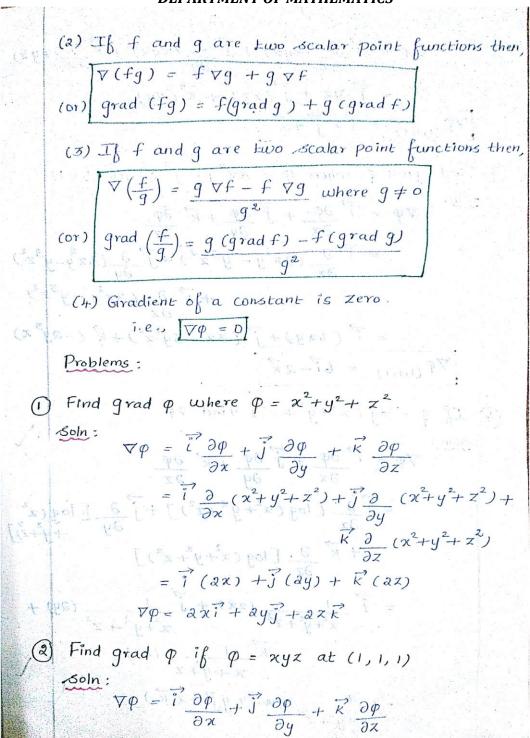




(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai Accredited by NAAC-UGC with 'A++' Grade (Cycle III) & Colombia Accredited by NBA (B.E - CSE, EEE, ECE, Mech & Colombia Tore-641 035, TAMIL NADU

DEPARTMENT OF MATHEMATICS







(An Autonomous Institution)

DEPARTMENT OF MATHEMATICS

