

Day: M T W T F S

Date: ___/___/___

Name M. Dand

ID 7769

Calculus..

Qno 2 Application of derivatives and Integration in Engineering.

Ans Application of derivatives:

Following are the application of derivatives.

- Tangent and normal line
- Rolle's theorem
- Lagrange's Mean value theorem
- Cauchy's mean value theorem
- Newton's method
- Related Rates
- Linear approximation
- Critical point
- Increase and decrease function
- Convex function
- Inflection Point
- Curvature and Radius of Curvature
- Optimization problem involving numbers.
- Van der waals equation
- Curve sketching.

Application of Integration:

- Area between Curves
- Distance velocity, Acceleration
- Volume
- Average value of a function.
- Work
- Center of mass
- Kinetic energy, improper integrals
- Probability
- Arc length
- Surface Area