

chemistry Second year (education) (مميز)

Faculty of Science

differential equations

Department of Mathematic.

Second term exam

تناول بالبحث احد اموضوعات الاتية:

- (1) Solution of differential equation from first order and its applications.
- (2) Homogeneous and exact differential equation.
- (3) First order linear differential equation and Bernoulli differential equation
- (4) Solution of the homogeneous differential equation with constant coefficients from second order.

- (5) Solution of the high order homogeneous differential equation with constant coefficients.
- (6) Solution of Cauchy – Euler differential equation.

- (7) Integrating Factor to change non-exact differential equation to be exact.
- (8) Variation of parameter method to get special solution of a nonhomogeneous differential equation of the second order.

- (9) the relation between Wroneskien and linearity of the solutions of differential equation and the solution set of it.
- (10) comparison between Variation of parameter method and Solution of Cauchy – Euler method.